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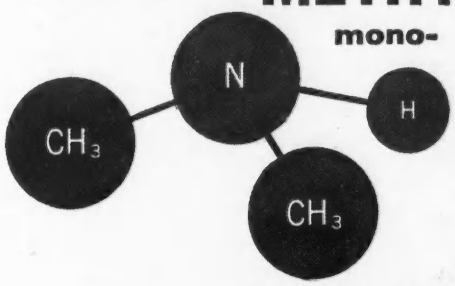

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Oil, Paint and Drug Reporter

Vol. 180 No. 24 30 Church St., New York 7, N.Y. December 11, 1961

MARKETING VICE-PRESIDENT: Walter C. Deakyne, elevated from general sales manager of Heyden Newport Chemical Corporation's Heyden Chemical Division to marketing vice-president of that unit.

Electrolytic Operation Links European Firms

Formation of a new electrolytic chemical company and an important merger in the plastics research field are bright areas in the European chemical spotlight this week.

The electrolytic operation, called Societe Electro-Chimique Ugine-Caffaro, is a joint operation of Societe Ugine, French chemical and aluminum producer, and Societa Caffaro, an Italian electrical utility holding company. The new company is planning an electrolytic operation somewhere in Italy.

Participation of utility companies in chemical and plastics ventures has an Italian precedent in the aggressive expansions of the big Edison utility group of Milan. French and Italian financial groups have also bought into the electrolytic venture.

In the plastics field, Societe Polyplastique, French company noted for its research work in plastics and elastomers, has been acquired by Kleber-Colombes SA, French tire and rubber firm.

Polyplastique reportedly holds some 200 patents, with emphasis in the fields of reinforced polyethylene, fabrication of copolymers and the grafting of different polymers. Kleber-Colombes has technical links with B. F. Goodrich Company, of Cleveland, Ohio.

In another European development, Compagnie de Saint-Gobain, leading glass and chemical maker, says it will acquire a minority interest in Gruenzweig & Hartmann, of Ludwigshafen, Germany, producer of insulating materials. The German company expects its 1961 sales of insulating materials to be up 22.5 percent over 1960's $44.2 million.

Pennsalt in Joint Project For Colombian DDT Plant

Pennsalt Chemicals Corporation is joining with local interests to build a DDT facility near Zipaquira, Colombia. Annual capacity will be 1,500 metric tons.

The facility will be operated by Sociedad Cloro-Derivados, Ltd., jointly formed by Pennsalt, Institute de Fomento Industrial and Compania de Cloro.

The Colombian interests will hold 62.5 percent, and Pennsalt the remainder. Investment in the facility will total 12 million Colombian pesos.

Plant site is adjacent to Planta de Soda de Betania, a caustic-chlorine installation which will supply the chlorine for DDT output.

Also on the plant's production site will be monochlorobenzene, chloral, p-dichlorobenzene and o-dichlorobenzene.

Pennsalt has existing chemical operations in Peru, Venezuela and Mexico. Its wholly-owned subsidiary, Industrial Cx Quimica Pennsalt, is reportedly Mexico's largest caustic-chlorine producer.

Rare Earth Expansion

Ronson Metals Corporation, Newark, N. J., has expanded its capacity for production of metal misch (mixed rare earth metals) by 30 percent. Also, a new metallurgical and electronic laboratory has been constructed to enable Ronson Metals to expand its research and development work in the field of rare earth metals and alloys.

Pharmaceutical Firms, Kefauver Are Edging Towards Agreement On Drug Legislation Principles

The pharmaceutical manufacturing industry and Sen. Estes Kefauver of Tennessee show signs of edging towards an agreement on some of the principles to be included in new legislation for tighter federal controls over drug producers. With one major exception—in the area of drug patents—differences now appear centered largely on precise language to be included in the statute. As to the proposed changes in the patent laws, however, they still stand as far apart as ever.

This came to light last week when the drug industry trained some of its biggest guns on the Kefauver-Celler drug industry antitrust bill (S 1552) at a two-day hearing given over to the Pharmaceutical Manufacturers Association to record the industry's objections to the bill. The association summoned a battery of leaders in the drug manufacturing, medical and patent law professions to tell its story.

Drug Industry Softens Opposition

That some softening of drug industry opposition to new control legislation has taken place in recent months became apparent at the start of the hearings, in the testimony of Eugene N. Beesley, president of Eli Lilly & Co., Indianapolis, Ind., and chairman of PMA's board.

He presented the association's main statement against the bill. In later questioning, Sen. Kefauver admitted agreement in principle with several of Mr. Beesley's points and a willingness to consider others.

In the first place, Mr. Beesley placed the industry on record in "support of the principle that, before introducing a new drug, the manufacturer should be required to submit to the Food & Drug Administration substantial evidence not only that the drug is safe but also that it produces the results claimed."

Next, he proposed that every manufacturer of drugs for interstate commerce "be required to register with the FDA."

Thirdly, he recommended that the inspection powers of FDA be broadened "in line with the principle of S 1552" and suggestions of FDA and Secretary of Health, Education & Welfare Abraham Ribicoff.

Mr. Beesley's support of the principle that a drug should be shown to be effective before it can be marketed was in relation to a provision in the Kefauver bill amending the new drugs section of the food and drug law to require a showing of efficacy as well as safety in new drug applications.

He explained that it is industry's understanding that a manufacturer would be required to provide only substantial evidence that a drug produces the effects claimed for it.

He would not be expected to prove that

—*Continued on page 52*

IN DUAL POST: Dr. C. C. Schulze, elected vice-president and executive of General Aniline & Film Corporation's chemical group. He had been general manager of the Antara Chemicals Division.

Vinyl Acetate Finds Home With Monsanto

The hydrocarbons division of Monsanto Chemical Company is ready to go ahead with building plans for a multi-million dollar vinyl acetate monomer facility in Texas City, Tex. Construction will be completed by the end of next year.

Vinyl acetate is a new product for Monsanto, though it brings in the monomer from Canada (some 42 million pounds in 1960).

With a capacity of 45 million pounds per year, the plant's output will be consumed internally by other company locations in the manufacturing of vinyl plastics and emulsions.

The vinyl acetate will be made from acetylene produced at Texas City and acetic acid derived from ethylene to be manufactured at Chocolate Bayou, near Alvin, Tex.

The contract for design and construction of the plant has been awarded to Scientific Design Company, New York.

Chemical Marketing Cues . . .

37 ALUMINUM: Cost-cutting process may revive market for chemicals.

47 FARM CHEMICALS: What's the score on January 1 price advances?

47 DETERGENTS: Heavy-duty liquids seek bigger share of the business.

49 VINYL ACETATE: Beyond back-integration, a looming marketing battle.

JFK Tariff Plan Is Chilling Notion To Chemical Men

The administration's "new and bold" tariff policy—elaborately unveiled in twin speeches last week by President Kennedy before the National Association of Manufacturers in New York and the AFL-CIO in Miami, Fla.—is causing grave concern in some quarters of the chemical industry.

What's worrying chemical executives is that a liberalized foreign trade program will mean a further loss of jobs for those segments of the industry already hard-hit by mounting unemployment.

They also contend that it will weaken the US economically at a time when the international situation dictates that it remain strong.

These fears were expressed during the week before a house education and labor subcommittee in Washington and at the annual dinner of the Synthetic Organic Chemical Manufacturers Association in New York.

Impact on Ferro-Alloys Producers

R. L. Cunningham, president of Ohio Ferro-Alloys Corporation of Canton, Ohio, told the house unit—which under Rep. John H. Dent of Pennsylvania is studying the impact of imports on employment—that some 2,700 workers out of 10,600 employed by the seven major producers lost their jobs in 1959 because of ferro-alloy imports.

Mr. Cunningham predicted that another 500 workers in the ferro-alloys field will be displaced this year by imports. He also feels that 500 others (railroad workers, coal miners, coke and power plant workers, etc.) will be thrown out of work because of inadequate tariff protection.

Dr. Lewis E. Lloyd, economist of the Dow Chemical Company, Midland, Mich., in his house subcommittee statement downgraded the importance of foreign trade in the American economy, charging that the policy pursued in the past has caused unemployment.

Dr. Lloyd, who appeared as an individual and not as a representative of Dow, declared that a continuation of the trend towards free trade will have dire consequences for our future growth and job opportunities.

"One of the widespread concepts which has influenced our foreign trade policies is the notion that we must increase our foreign trade," he asserted.

"The proponents never indicate how much it should be increased. The supposition is that it should continue to increase, without limit."

The Dow economist feels we must find "a more rational basis" for trade policy than "trade just for the sake of trade."

"Not only is increased foreign trade as an objective unsound theoretically," he says, "it is also out of step with historical trends."

He recommends these four basic objectives in devising a foreign trade policy:

- Recognize that trade is not an end in

—*Continued on page 50*

Houston Chemical Starts Up Big Ethylene Oxide Facility

Houston Chemical Corporation has placed what is reportedly the world's largest single-unit ethylene oxide plant on stream at Beaumont, Tex. The big facility is geared to produce 80 million pounds a year, the company says.

Houston Chemical sells glycol under private label and in bulk under long-term contract to major oil companies and other concerns marketing private label brands of "permanent" antifreeze.

The ethylene oxide plant is the second unit in a multi-million dollar chemical complex at Beaumont.

In September Houston became the third major contender in the $270 million market for antiknock additives with its first shipment of tetraethyl lead.

Retail sales of antifreeze are expected to hit nearly 125 million gallons in the United States this year. Permanent types, with an ethylene glycol base, will account for more than 110 million gallons of the total.

Fertilizer Boost in Israel

Fertilizers & Chemicals, Ltd., Haifa, one of Israel's biggest chemical concerns, is expanding its capacity for granulated compound fertilizers with an investment of about $1.2 million. Capacity will be carried past 80,000 tons yearly.

DuPont's GM Disposal Plan Softens Blow to Shareholders

E. I. duPont de Nemours & Co. has detailed a plan to dispose of its General Motors Corporation holdings in a way that would minimize the impact of the court-ordered divestiture on stockholders. The duPont interests, however, continued to press in US District Court in Chicago last week for a delay in a final ruling until congress can act on pendng legislation granting tax relief to company stockholders.

The tax measure, which has already passed congress and is expected to be acted on promptly when the senate convenes in January, would treat the GM shares distributed as capital gains rather than earned income.

Crawford H. Greenewalt, president of duPont, outlined a plan under which about 26 million shares of GM stock would be exchanged for duPont stock or given to duPont holders in lieu of cash dividends, and about 35 million shares would be sold on the open market.

Mr. Greenewalt said the plan would be altered if congress provides tax relief.

DuPont's Stock Plan Outlined

Otherwise, the flexible disposal program would follow this outline:

- An exchange offer to duPont stockholders, involving an estimated 11 million shares of GM.
- Distribution of GM shares as stock dividends, amounting to about 15 million shares.
- Donation of 1.5 million shares to charitable trusts, the income being used in place of the $1.5 million to $2 million duPont distributes each year through these trusts.
- The balance of the shares would be sold in the open market over a ten-year period.

Earlier, Christiana Securities Company, owned by the duPont family, said it won't resist an order to dispose of General Motors stock received from duPont—provided congress votes tax relief.

The company's position was embodied in a resolution adopted by its directors and presented to the court prior to Mr. Greenewalt's appearance.

The holding company owns 535,000 GM shares and 13.4 million duPont shares, or about 27 percent of duPont's outstanding stock. The government has acted to bar Christiana from receiving additional GM shares in the distribution by duPont.

In other testimony, a securities specialist told the court that the prospect of 63 million GM shares hitting the market in the ten-year period would depress the price of GM stock by 15 percent.

Chemical Unionization Drive a Flop: Meany

A flop! That's what George Meany dubs the six-year-old drive of the American Federation of Labor and Congress of Industrial Organizations to bring chemical workers under the banner of one big union.

The chemical industry had been staked out as a prime organizing target when the AFL merged with the CIO in 1955. What went wrong? A lack of cooperation in the labor movement, says Mr. Meany.

A case in point, notes the AFL-CIO president, is E. I. duPont de Nemours & Co., Wilmington, Del., where the federation failed to get agreement from several unions in a move to organize duPont's 75,000 workers.

Uranium Operations Interesting at Freeport

Freeport Sulphur Company, with acquisition in mind, is studying the operations of Uranium Reduction Company and certain mining properties of Utex Exploration Company at Moab, Utah. New York headquarters of Freeport says the investigation will be completed and a decision made within sixty days.

The study is being made under an agreement with Uranium Reduction's principal stockholders, including Utex; Hidden Splendor Mining Company; American Zinc, Lead & Smelting Company, and Charles Steen, a major stockholder in Utex.

Although Freeport has no commitment to buy, the tentative purchase price for the Uranium Reduction acquisition would work out to $10 per share for the 1,761,182 outstanding shares

Tentative price for the Utex acquisition is put at approximately $8,200,000.

Allied Hiking Nitrogens

Allied Chemical Corporation's Nitrogen Divisioin iisi increasing the price of its entire nitrogen products line $3 per ton of nitrogen on January 1. The 2 percent increase, which stems from continued hikes in wages and raw materials, involves all nitrogen solutions, ammonia, ammonium nitrate, "ANL," urea, ammonium sulfate and all related products.

Tidewater, Collier Start Up Petroleum Naphthalene Unit

Tidewater Oil Company and Collier Carbon & Chemical Corporation have started operations at joint-venture petroleum naphthalene plant at Tidewater's Delaware City, Del., refinery.

The multi-million dollar facility, which produces naphthalene out of raw materials from the refinery, has an initial capacity in excess of 100 million pounds a year. Tidewater operates the jointly-owned plant and Collier markets the product.

The Week's Price Changes

Advances Dominate the List and Include Cottonseed Oil, Lard, Linseed Meal, Soybean Oil, Tallow, Tung and Zinc Dust.

Prices Advanced

Cocoa butter, 1c. per lb. (p. 60).
Coconut oil, crude, ¼c. per lb. (p. 60).
Cottonseed meal, $3.50 to $4 per ton (p. 60).
Cottonseed oil, crude, ¼c. per lb. (p. 60).
Refd., ¼c. per lb. (p. 60).
Greases, ½c. per lb. (p. 60).
Lard, cash, ¼c. per lb. (p. 60).
Linseed meal, $2 per ton (p. 60).
Peanut oil, crude, 1c. per lb. (p. 60).
Refd., 1c. per lb. (p. 60).
Silver bullion, 1c. per oz. (p. 37).
Soybean meal, $5 per ton (p. 60).
Soybean oil, crude, 5c. per lb. (p. 60).
Refd., ½c. per lb. (p. 60).
Tallow, ¼c. per lb. (p. 60).
Tung, ¼c. per lb. (p. 60).
Zinc dust, ½c. per lb. (p. 53).

Prices Reduced

Corn oil, crude, 1½c. per lb. (p. 60).
Refd., 1½c. per lb. (p. 60).
Tin, Straits, ⅝c. per lb. (p. 37).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Dec. 8, 1961	Dec. 1, 1961	Dec. 9, 1960
114.00	113.67	108.90

Synthetic Rubber: It's Bouncing

Despite heavy competition in synthetic rubber and the chemicals that go into it, 80 percent of the total United States rubber requirements will be filled by synthetic material five years from now. Today the figure is 72 percent; last year it was 69 percent. And, while three powerful economic forces are currently affecting the synthetic rubber business, they cannot stop the march of the product, says Dr. J. D. D'Ianni, of Goodyear Tire & Rubber Company, Akron, Ohio.

Speaking at last week's meeting of the American Institute of Chemical Engineers in New York, Dr. D'Ianni listed the triad of forces as:

- Competition between natural and synthetic rubber.
- Competition among the various synthetics.
- The "more-than-adequate" production capacity and the many producers of petroleum-derived raw materials for synthetic rubber.

Dr. D'Ianni, who handles chemical products liaison for Goodyear, said the commercial success of polyisoprene rubber, a complete replacement for natural rubber, depends on the availability of high-purity raw material at a price which will make the finished product competitive with natural rubber.

Increased emphasis on the newer stereo-

—Continued on page 43

MOVES UP: V. Eric Johnson, named assistant director of purchases for Chas. Pfizer & Co., New York. Formerly purchasing agent at the Brooklyn, N. Y., plant, he is succeeded there by Robert H. Wilson.

Polyethylene Transparency: Worth 4 Cents per Pound?

Will industrial packagers be willing to forego polyethylene's transparency and gloss for a saving of 4 cents a pound? Union Carbide Plastics Company, New York, apparently thinks so.

The Union Carbide Corporation subsidiary is now offering a new polyethylene compound designed for extrusion of industrial grade film—at 23½ cents a pound. Regular consumer packaging film remains at 27½ cents a pound.

The new film was developed to meet demand for a covering to protect goods in transit from dirt, injury, moisture.

Named "Bakelite DFD-0468 Natural 7," the material is uniformly strong, but is less transparent and glossy than film recommended for consumer packaging, Carbide says.

German Plastics Output Rising 10 Percent in '61

German plastics output this year will reach nearly 1.1 million tons, the Verband des Chemischen Industries estimates, topping the one-million-ton mark for the first time, and a gain of a little less than 10 percent over 1960's figure.

The increase this year, the German trade association notes, is considerably less than the 20 percent growth scored in 1960. Packaging in 1961 for the first time tops the list of plastic end uses in Germany.

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Polyethylene's Friends

Polyethylene has three friends—cellophane, polyester film and aluminum foil—which are going to be good sales boosters during the next four years.

The three friends, through their requirements for packaging applications, are expected to provide a 63 percent increase in demand.

At least that is what they are saying at US Industrial Chemicals Company, a big New York-based supplier which has just completed a market projection through 1965.

Says USI: "Consumption of polyethylene for coating cellophane, polyester film and aluminum foil will rise from approximately 23 million pounds in 1960 to about 38 million pounds in 1965."

By 1965, about 19,300,000 pounds of polyethylene will be used to coat cellophane in order to provide a versatile combination for profitable packaging applications in many end-user fields. Last year, about 12 million pounds were consumed in this use, reports this division of National Distillers & Chemical Corporation.

As for polyester film uses, a 100 percent increase—from 3 million pounds in 1960 to 6 million pounds in 1965—will characterize the market for polyethylene coating. One big potential: the boil-in-bag market.

The company goes on to say that by 1965 consumption of polyethylene to coat aluminum foil—in both extrusion coating and laminating—may well approach 12,900,000 pounds. About 8 million pounds were used to coat foil in 1960.

In addition to expanded use in the hygroscopic products area, foil polyethylene, too, is expected to ride the fast-rising star of the boil-in-bag foods, and to have its place in "freeze-dry" food packaging, as well.

Chemical Industry Told to Brace For a Looming Red Trade Offensive

As if the chemical industry doesn't have enough to worry about with the squeeze on profit margins—and the word is that this throbbing headache is likely to be around for some time to come—it now must contend with threats from two emerging chemical powers: Communist China and the Soviet Bloc. Chemical men have been warned that China, as the latest contender, already has the resources, organization, manpower and intelligence to become a serious chemical competitor in world markets.

UNIT HEAD: Carl Gloskey, named general manager of the chemicals division of Metal & Thermit Corporation. He had been manager of the process development division.

R. W. Bennett of Food Machinery & Chemical International Company, New York, pointed out to the American Institute of Chemical Engineers in New York that China, starting from a statistical zero, has become in eleven years the equal of Germany or France in national income.

A Big Power by 1965

By 1965, he feels, China will rank third behind the US and Russia in total production.

Mr. Bennett, who addressed a featured symposium on competition by the US in world chemical markets, notes that China already ranks third in pig iron, coal and magnesium production.

After increasing its fertilizer output five-fold to 250,000 tons from 1949 to '59, the country is now gunning for an expansion to 3.2 million tons in '62, the FMC man reports.

Figures cited by Mr. Bennett show Chi-

—Continued on page 51

Udylite Won't Merge With Metal & Thermit

Udylite Corporation has had a second thought on its planned merger with Metal & Thermit Corporation, and has called the match off. Contributing to Udylite's change of mind: "Possible legal complications" with the Federal Trade Commission, and objections registered by holders of M&T's preferred stock.

Charles J. Beasley, M&T president, terms the Udylite decision a disappointment and a surprise. He says:

"We were naturally surprised after eight months of thorough study and negotiation

—Continued on page 67

Israel Petrochemical Sets Major Carbon Black Plant

Israel Petrochemical Enterprises, Ltd., Haifa, has set plans to build a $3 million carbon black plant, using patents, plant design and know-how of United Carbon Company, Houston, Tex.

The plant will be completed by the second half of 1963 with an initial rated capacity of 20 million pounds a year. Israel Petrochemical will construct the unit as well as operate it.

In addition to the carbon black plant, Israel Petrochemical is planning a 12,000-ton-a-year ethylene plant, a 6,000 ton polyethylene unit and a 6,000 ton detergent alkylate plant. Details on these projects have not yet been announced.

Exports from the carbon black plant will be sold and serviced exclusively by the international sales and technical services sections of United Carbon's marketing department as a completely independent activity.

OPD Reports From Europe

'United States' and 'Dumping' Sound Just About the Same To Chemical Men Overseas

Say the words "United States" to a sleeping European chemical executive these days—or nights—and the chances are he would grumble in response: "Dumping!" While polyethylene has been the leading star in this nightmare of 1961, fears are growing about US shipments of phenol, benzene, styrene and synthetic rubber. The "diene" rubbers in particular are felt to be vulnerable in the international market. The slapping of an anti-dumping duty on US-produced polyethylene by the French Ministry of Finance apparently broke a dam on long-repressed bitterness which is now spilling out into formal complaints, applications for higher duties and public charges of unfair competition.

Polyethylene anti-dumping duties are now being considered officially or discussed informally in Germany, Britain, Holland and Australia.

Many Entrants in Race

And while polyethylene is the product in the news, there are plenty of other products in the dumping race. If American companies get the lion's share of the blame, most will concede they're not alone. Italy is in the process of getting anti-dumping legislation on the statute books.

The German industry has sent detailed allegations to the Ministry of Economics in Bonn charging dumping of polyethylene by US producers.

According to reports, the charges specifically mention eight American producers, both large and medium-size companies, and charge their prices on the plastic in Germany in September were 17.6 cents a pound before 15 percent duty and 4 percent equalization tax.

But if polyethylene is the leading actor in the dumping saga, German executives are also concerned about prices on bulk American shipments of phenol, benzene and styrene.

The fear that synthetic rubber could be the next major product to face international dumping is emphasized by the 5 percent price cut in the price of SBR rubber by Bunawerke Huels, Germany's biggest producer. The new price will be 211.50DM ($52.875) for 220 pounds.

Huels gives no reason for this latest cut, which follows a 5 percent cut last spring made to meet the import cheapening effects of the 5 percent upward revaluation of the Deutsch Mark. Industry sources believe import pressure, especially from the US, is a factor in the move.

Synthetic rubber currently is on the Common Market's external tariff "G-list" which means it attracts no duty, against what Europeans charge are high American duties on the product.

So far, though, continental executives concede, US synthetic rubber shippers have kept the price fairly stable. Rapid expansion of rubber capacity in Poland and

—Continued on page 57

Dow Will Resume Output At Second Magnesium Unit

Dow Chemical Company is rehabilitating a portion of its "Plant B" magnesium production facilities, operated at Freeport, Tex., by the company's Texas Division. The unit has been closed since early 1958.

Latest plans are to put two of the eight "Plant B" magnesium electrolytic cell buildings back into production on January 2.

The five cell buildings of "Plant A" have been operating at full capacity for some time, a spokesman says, and currently sales of magnesium are outstripping production. Heretofore, the difference has been made up from ample inventory, but stocks are now approaching normal working level, it's pointed out.

TO GUIDE DEVELOPMENT: Dr. Allen E. Abrahams, appointed manager of commercial development by Witco Chemical Company, New York.

Belgian Merger Puts A Giant on the Scene

The big Belgian chemical merger, consolidating a full half of the nation's total chemical capacity, has now been completed. The new company, Union Chimique-Chemische Bedrijven, combines the assets of four large producers.

They are: Societe Industrielle de la Cellulose (SIDAC), plastics processor and film maker; Union Chimique Belge, chemicals and plastics producer; Fabelta SA, maker of synthetic fibers, and Pegamoid SA.

Constitution of the combination's managing board reflects the strong influence in Belgium of the two powerful French groups: Societe des Usines Chimiques Rhone-Poulenc and Solvay & Cie.

The new board includes Louis Clouzeau, general director of Rhone-Poulenc; Sylvain Marechal of the former Union Chimique Belge; Jacques Motkel, general director of Fabelta, and Albert-Edouard Janssens. The Janssens family is closely linked with the Solvay interests and has been dominant in SIDAC management.

The new firm is to be called by the initials UCB, representing the title of Union Chimique Belge. However, on the basis of capital transfers involved in the complex merger, the absorbing company is actually SIDAC.

Hercules Making Plans For Nitrogen Chemicals

New facilities for the manufacture of nitrogen chemicals will be built by Hercules Powder Company at its Missouri Chemical Works, Louisiana, Mo.

Missouri Chemical Works was purchased in 1954 from the United States government and has been producing anhydrous ammonia since that time, but has been expanded to become a major producer of methanol, formaldehyde and pentaerythritol. Now, ammonia will be further processed to provide urea, urea solutions, urea-ammonium nitrate solutions, ammonium nitrate solutions, and ammonium nitrate-ammonia solutions. In addition, two grades of prilled ammonium nitrate will be produced.

DuPont Hits Von Kohorn for 'Pirating' and 'Thefts'

E. I. duPont de Nemours & Co. has brought charges in Federal Court, New York, alleging that some of its employees were spirited away and their knowledge of secret duPont processes stolen by two other companies.

Joining duPont in the suit, growing out of the Wilmington, Del., company's extensive polyesters business, is its Argentine affiliate, Ducilo Sociedad Anonima Industrial y Commercial.

Named as defendants are: Von Kohorn International Corporation, White Plains, N.Y.; three of its officers (Henry Von Kohorn, president; Ralph S. Von Kohorn, executive vice-president, and Gerard S. Bibo, vice-president), and a German subsidiary, EFEM Gesselschaft fur die Einrichtung Industrieller Anlagen, of Darmstadt, Germany.

The complaint states that the defendants have used or offered to use information pertaining to duPont's secret processes in the design, construction, and operation of plants for production of cellophane, nylon, "Dacron" polyester fiber, and "Mylar" polyester film in New York and other locations throughout the world, including the Soviet Union, Yugoslavia, Germany, Japan, and Argentina.

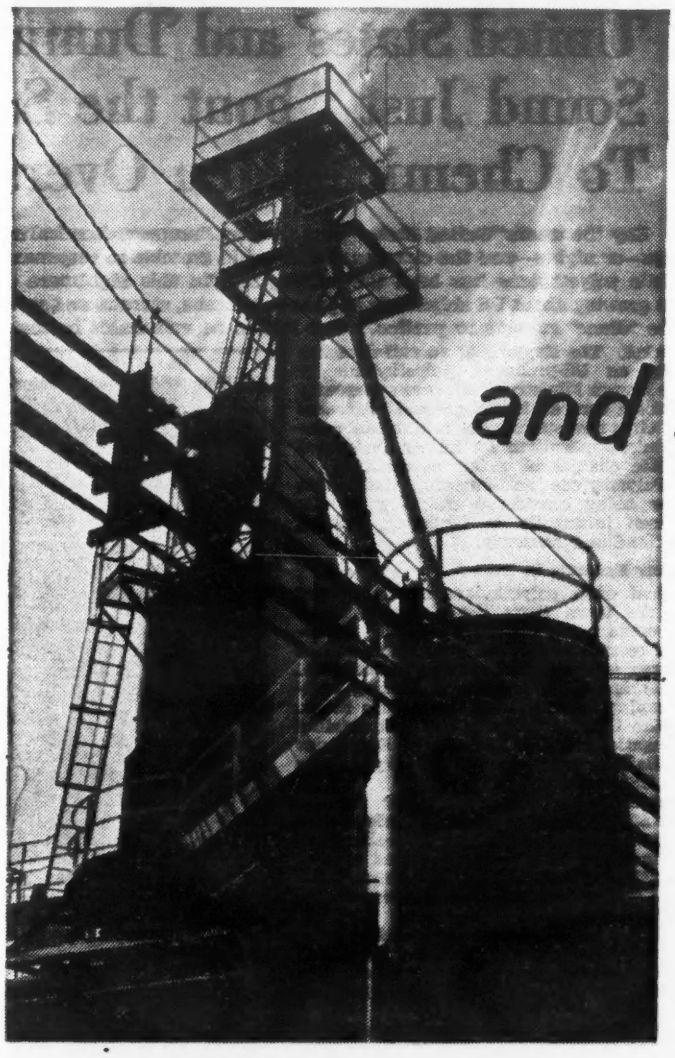
DuPont and Ducilo seek broad injunc-

—Continued on page 42

Von Kohorn Denies Charges

Von Kohorn International Corporation last week denied charges of polyester process thefts and pirating, made a few days earlier by E. I. duPont de Nemours & Co., and added

—Continued on page 42



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Chemical Specialties: Good News From FDA

If chemical specialty makers are breathing a little easier these days, the reason isn't hard to find: Food & Drug Administration says it plans no crackdown when the hazardous substances labeling law goes into effect on February 1.

This choice bit of good news was let drop last week before the Chemical Specialties Manufacturers Association by John L. Harvey, deputy commissioner of FDA.

Mr. Harvey told CSMA's forty-eighth annual meeting in New York that the agency has never before clamped down hard on technical violators of "new rules" and there's "no reason" to believe it will do so now.

However, he urged chemical specialty producers to bring their labels into compliance with the law, indicating it is foolhardy to bank on more time.

Mr. Harvey pointed out that the Department of Health, Education & Welfare has not yet taken a position on the bill which would give the Commissioner of Food & Drugs the power to extend the labeling law deadline for another year beyond 1962.

Other highlights of the conclave:

• CSMA elected a new administration, headed by Charles E. Allderdice, jr., as president. Mr. Allderdice is president of the Bell Company, Chicago.

• The association was told by its outgoing president, Charles E. Beach, that the industry must improve its communications with the consumer, the government and other trade groups.

• Lawrence A. Coleman, general counsel of Allied Chemical Corporation, New

—Continued on page 45

Drug Trade Backs Forum On Full Disclosure Rule

A newly-developing Food & Drug Administration idea of communicating with industry through open forums on questions of policy and methods of administration was carried forward another step last week.

More than two hundred representatives of the drug industry and its allied professions accepted the opportunity to attend and participate in a question-and-answer conference, sponsored by the *American Druggist*, with policy-making and law enforcement officials of the agency on problems relating to the new "full disclosure" rule of the agency in drug marketing.

Questions covered a wide range of subjects.

In each instance one or more of a panel of five officials of FDA attempted to provide the detailed answer.

Tung Oil Quotas Investigation Finds Tariff Commission Unable To See Eye-to-Eye With USDA

The Tariff Commission and the Department of Agriculture fail to see eye-to-eye on the tung oil supply situation and its immedate future. Whereas the department believes that quotas can safely be lifted so that imports may again freely enter the country, the Tariff Commission says "No," feeling that such action could lead to so great a flood of tung oil into the country that it would interfere with the price support program materially.

The commission made known its opposing views in a report to President Kennedy last week, in response to his request of last October that the tung oil supply situation be investigated in the light of prospective short world supplies.

The commission was unanimous in its findings that suspension of the quotas would be a mistake.

Under a proclamation issued in October, 1960, imports of tung nuts and tung oil into the United States are limited to 26 million pounds of oil annually, with quotas fixed for Argentina and Paraguay, the two principal sources. The proclamation by its original terms is to continue in effect until November 1, 1963.

USDA Data Points Up World Shortage

At hearings before the commission last October, data submitted by the Department of Agriculture tended to show that world supplies of tung oil were becoming scarce because of a sharp drop in availabilities from Red China and a short crop in Argentina due to unfavorable weather conditions.

In the light of these conditions, and since the Commodity Credit Corporation had been able to dispose of all its stocks of the oil, the department felt that high world prices would discourage any heavy shipments to the US.

Tariff Commission estimates tung oil production from the 1961 crop of tung nuts at 35 million pounds and the carryover on November 1 at 11 million pounds.

While other estimates place consumption of the oil in this country at around 45 million pounds a year, the Tariff Commission notes that it is declining and reached only about 39 million pounds in the 1960/61 season.

It blames this downward trend in consumption on competition from other drying oils and synthetic vehicles, such as non-oil latex, vinyl and acrylic emulsions.

It says these shifts are still in progress, and adds that "it is unlikely that natural drying oils will regain their former position in these markets."

The commission says that the ban placed on imports of tung oil into the US from Red China increased the quantities of oil seeking an outlet in the principal European markets and Japan.

This situation, together with maintenance of a domestic support price for the oil in this country, generally caused the US to be a more attractive market for Argentine and Paraguayan tung oil.

Drew Chemical Directors Put Kleinhans at the Helm

The board of directors of Drew Chemical Corporation, New York, has elected Lewis C. Kleinhans president and chief executive officer.

The position of president at Drew Chemical Corporation has been vacant since March of this year when a group headed by Lehman Brothers, New York investment bankers, purchased all of the company's outstanding common stock.

Mr. Kleinhans has had extensive executive experience in the chemical process and other industries. Most recently he was president and principal owner of Standard Insulation Company, Rutherford, N.J.

RE-ELECTED: Carl A. Gerstacker, chosen again to serve as president of Synthetic Organic Chemical Manufacturers Association. He is board chairman of Dow Chemical Company.

Titanium Smelting: Study Set in Norway

National Lead Company, New York, is planning an engineering investigation on the smelting of titanium (ilmenite) ore from the Tellnes mine of its Norwegian subsidiary, Titania A/S, near Hauge i Dalane, Norway.

The object of the study is to determine whether an electric furnace process, known as the QIT process, which converts titanium ore into a slag of high titanium content and pig iron, is feasible for treating Norwegian ores. The investigation will be made jointly by Quebec Iron & Titanium Corporation, developer of the process, and National Lead.

If the results of the evaluation project are favorable, it is contemplated that a smelter will be built adjacent to the Tellnes mine in Norway to produce titanium slag and pig iron for European titanium pigment and steel industries, which will process about 600,000 tons of ilmenite concentrate annually.

Presently, Norwegian ilmenite concentrate is shipped directly to European titanium pigment manufacturers.

Quebec Iron & Titanium Corporation, owned by Kennecott Copper Corporation and New Jersey Zinc Company, operates

—Continued on page 56

French Group to Meet

The American Section of the Societe de Chimie Industrielle is holding its annual meeting Thursday (December 14) at the Chemists' Club in New York. The agenda includes a report of the board of directors, reports of the secretary and treasurer, reports of committee chairmen and election of officers.

Nitrogen Running With Polyethylene In Crowded Field

An industry over-capacity for nitrogen continues to exist, and the pace of new plant construction, under way or firmly scheduled, indicates no short-term relief. In fact, says John C. Denton, the supply imbalance is likely to grow more acute in the next five years, though not becoming as critical as it was through 1956.

Mr. Denton, president and chief executive officer of Spencer Chemical Company, Kansas City, Mo., sees an equally overcrowded market for Spencer's other basic product: polyethylene.

How Polyethylene Looks to Spencer

In a speech to the New York Society of Security Analysts last week, he projected low-density polyethylene demand in 1965 at 1.4 billion pounds.

Fertilizer Potential Seen Great

Though now doing some $1.25 billion in business yearly, the US fertilizer industry has not begun to approach saturation. So Robert W. Schram, general manager of development for the Southern Nitrogen Company, told the American Institute of Chemical Engineers in New York last week. Mr. Schram sees room for growth in the domestic market in the fact that less than 50 percent of the harvested crop of the nation is being fertilized. In Europe, he points out, consumption of plant nutrients per acre is five to fifteen times greater than that of the US.

This, said Mr. Denton, is a conservative estimate, but even if the most optimistic forecasts become fact, a market surplus of polyethylene would continue beyond 1965.

The nitrogen surplus is expected to be felt keenest East of the Rockies—in the midwest and southeast—where most of the new capacity is being added.

However, the short-term price outlook on anhydrous ammonia remains steady, as the potentially depressing influence of the new capacity will not make itself felt until 1962 and beyond.

Having coped successfully with declining profit margins in these two products by way of forward integration through acquisition, Spencer's emphasis now will be on developing and orienting its new interests rather than on further arquisition.

Mr. Denton noted for the financial men that the diversification program was mapped out and completed within less than two years, carrying Spencer into finished

—Continued on page 46

Perkins Glue Sticks On To Spencer Chemical Co.

Spencer Chemical Company officially entered the adhesives field last week with the acquisition of Perkins Glue Company, Lansdale, Pa.

Spencer acquired all of the assets of Perkins in exchange for 51,204 shares of its common stock as part of an acquisition plan that has been in the works since last summer (OPD, 8/7/61).

Perkins, which had annual sales of $4,869,993 in 1960, will be operated as a wholly-owned subsidiary of the Kansas City, Mo., chemical company. The previous management of Perkins will continue in active direction of the firm's business.

Perkins, established in 1899, specializes in the manufacture of wood adhesives. Its acquisition is considered a significant step in Spencer's plan of growth and diversification. Spencer has a basic manufacturing position in both urea and

—Continued on page 57

Pyrethrum Crop: Is It Flowering Enough This Year?

Hopes are dimming that pyrethrum growers in Kenya will be able to meet ambitious production goals set for the current crop year—ending June 30, 1962.

Rough weather—a three-month drought followed by devastating floods—has had its effect, but this reportedly has been offset somewhat by an increase in planting.

Through October, growers' deliveries to the Pyrethrum Board of Kenya exceeded those of a year ago, it's reported, but were falling short of planned increases in production.

Early in 1961, the Pyrethrum Board licensed farmers to produce an anticipated 14,000 tons of the natural insecticide in the year beginning July 1, 1961—up sharply from only 9,165 tons in the previous crop year.

The new target appeared to be substantially on schedule through September, the official figures reveal. However, the October harvest was only 833 tons as compared with 787 last October.

"Historically, the first half of the crop year is the major production season," the report from Kenya states.

"On January 1, 1961, Kenya's pyrethrum growers had harvested 5,200 tons, or 60 percent of the total, for the past crop year.

"The comparable figure on January 1, 1962, should be 8,350 tons to meet the new goal, but by October 31, the harvest had been only 3,700 tons."

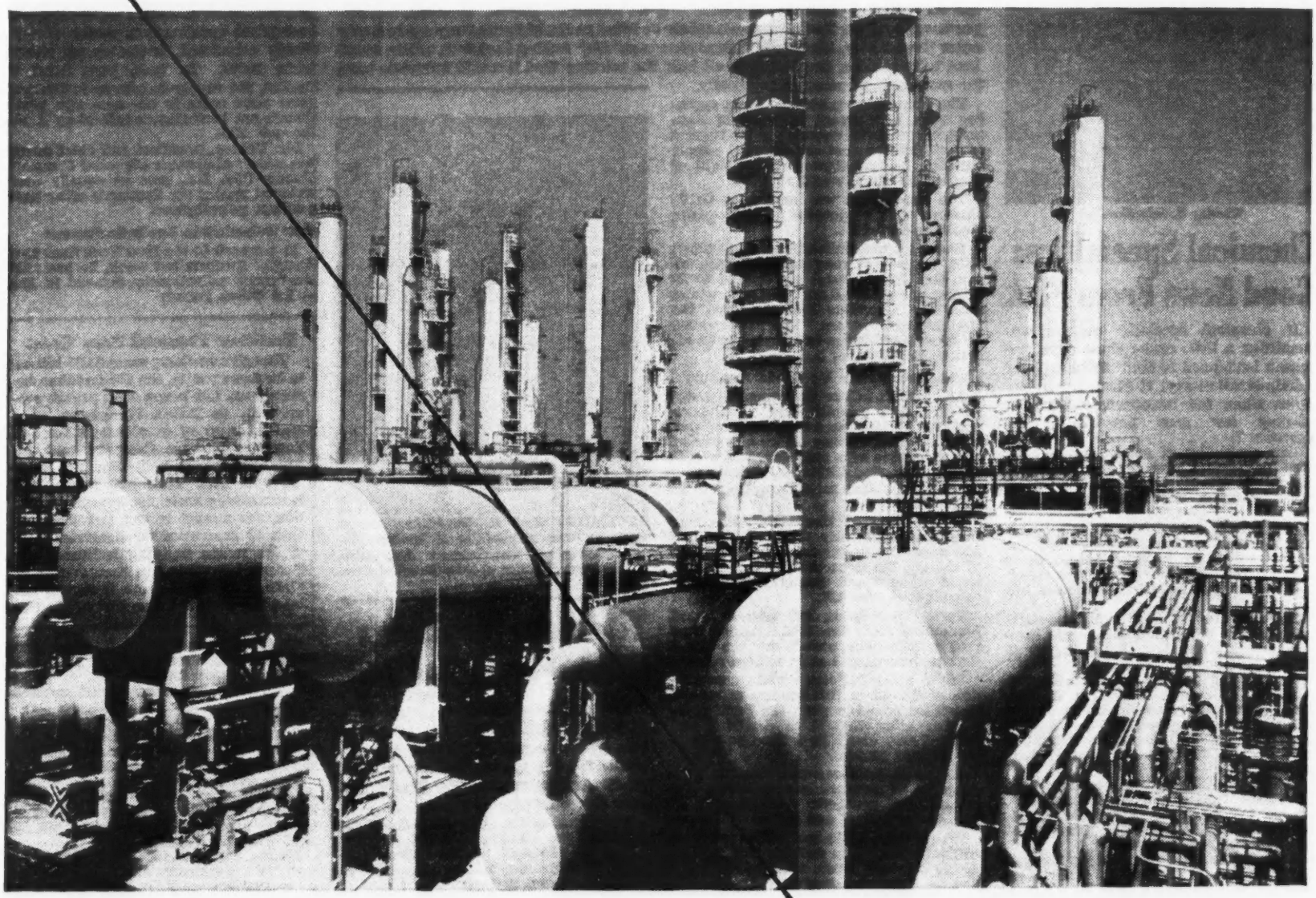
Thus, the report goes on, pyrethrum growers need to turn out at least 4,650 tons in November-December—or more than the total harvest for July-October inclusive.

Reliable sources in New York, however, are saying that the pyrethrin content of the flowers is believed to be lower than

—Continued on page 67

Meeting Dates
May Be Found
On Page 9

Butylenes? Petro-Tex!



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A LOOK AT THE FIGURES

Chemicals Production: How It's Going

		September 1961	September 1960
Acetic Acid, Synthetic	lbs.	63,816,423	58,550,306
Acetone	lbs.	66,456,537	67,224,659
Ammonia, Anhydrous	tons	396,008	364,590
Benzene	gals.	36,702,278	35,393,386
Chlorine	tons	349,896	373,391
Formaldehyde (37% basis)	lbs.	155,531,726	142,755,075
Methanol, Synthetic	lbs.	151,256,270	175,976,035
Phthalic Anhydride	lbs.	31,614,358	29,168,883
Sodium Hydroxide (Caustic Soda 100% NaOH)	tons	370,023	393,169
Sulfuric Acid (100% H_2SO_4)	tons	1,390,948	1,350,141

Sources: Tariff Commission, Bureau of Census

FDA Is Informative

There is much that is well worth learning for everybody in the chemical, drug and food trades in the article on page 3 last week which has to do with a question that has been puzzling the food additives trade.

Insofar as the products of that trade are concerned, the article adds little, if anything, to the useful information contained in what was said by the Manufacturing Chemists' Association about "Food Additives: What Are They; How They Are Used," in a booklet published early in this year (reviewed in OPD April 10). The informatively instructive features of last year's article are offered in what is reported on the response of the Food & Drug Administration in connection with the various aspects of the additives trade's participation in the latest conference of the federal agency with the Food Law Institute. Here again, credit is deserved by the Manufacturing Chemists' Association, whose additives committee chairman presented the questions with quite pertinent comment appreciative of FDA functioning.

The lesson for members of the chemical, drug and food trades, at all levels of status, is directly presented in the informative replies given by FDA spokesmen to members of the trade who participated in the question-and-answer contributions to the conference program. Those responses (printed on page 73 last week) should be filed in the reference libraries of all who have any need to know what they tell, or may have need for similar information in any areas of FDA operations.

That agency has long been one of the best and most responsive sources of information in the field of federal regulatory services. It is ready to expand such service in keeping with the needs of its expanding functional scope. All national organizations of trades subject to FDA regulation should make it a serious practice to arrange at least annual question-and-answer conferences with it; most of them already get a deal of useful, necessary information by way of correspondence; but, the person-to-person method is a much more satisfactory one.

Teaming With Industry

Chemicals are essential as materials in the productive operations of all industries. Consequently, the chemical industry is an essential member of the industrial world. The industry and its products are so closely teamed in respect to all aspects of economic progress that there could not be, would not be any progress if it did not collaborate in every respect as a member of that team.

What was reported on page 4 last week provides convincing statistical support for that conclusion. It also makes it clear that the chemical industry can and does contribute quite substantially to national economic progress by way of its own efforts.

There is another slant to the proper viewing of the teamwork that should characterize the relations of chemicals —and the industry that provides them —and all other industries that must be chemically served. Some useful viewing in that connection has been done in a conference of members of the university staff and representatives of various fields of industry held at Princeton last year under the sponsorship of the Office of Special Studies of the National Science Foundation.

That conference was devoted to the scientific and organizational aspects of basic research. A report of its results was released about ten days ago. Its primary finding was that industry must take an increasing responsibility in the financing of the basic research training of the scientists for whom it will have need and use.

Among the proposals of the conference having to do with how industry can and should support and promote basic research were the financing of post-doctoral fellowships; sabbatical leaves for industrial scientists for appropriate university attendance; establishment of large independent research laboratories where scientists would be free from the pressure of industrial research.

Coding Business Ethics

In a consultation with an advisory council composed of some twenty representatives of business, started more than six months ago, the Department of Commerce set out upon an endeavor to draft a code of principles for the guidance of business in ethical conduct. According to latest official expectations, that job may produce some results "about January."

The job has had to do with such matters as truth in advertising, expense account abuses, pricing practices and "payola" and other giftgiving.

Apparently, the counselors have not got much, if any, motivation from any study of the codes of various business organizations, such as that of the Chamber of Commerce of the United States, adopted in 1924, the "wisdom and soundness" of which "have not been diminished by time," according to recent comment by a former president of the chamber.

The Secretary of Commerce, when asked why the council had been so long and slow in getting nowhere with the creating of a code, is reported to have said: "It's just hard to do; it's hard to write a new Ten Commandments." Anybody who has attempted to differentiate between right and wrong in what has to do with somebody else will go along fully with the secretary.

Meetings

American Association for the Advancement of Science, Denver, Colo., December 26-31.

American Chemical Society, national meeting, Washington, D. C., March 20-29.

American Society for Testing Materials, committee week, Statler-Hilton hotel, Dallas, Tex., February 5-9.

Association of American Soap & Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 24-26.

Chemical Market Research Association, Warwick hotel, Philadelphia, February 2-3.

Drug, Chemical & Allied Trades Association, annual banquet, Waldorf-Astoria hotel, New York, March 1.

Northeastern Weed Control Conference, New Yorker hotel, New York, January 3-5.

Pharmaceutical Manufacturers Association, eastern regional meeting, Waldorf-Astoria hotel, New York, December 11-12.

Pharmaceutical Manufacturers Association, central regional meeting, Edgewater Beach hotel, Chicago, February 13-14; western regional meeting, Ambassador hotel, Los Angeles, February 19-20.

Salesmen's Association of the American Chemical Industry, Christmas party, Waldorf-Astoria hotel, New York, December 13.

Salesmen's Association of the American Chemical Industry, joint meeting with the Chemical Buyers, Group of the National Association of Purchasing Agents, Roosevelt hotel, New York, February 1.

Societe de Chimie Industrielle, American Section, annual meeting, Chemists' Club, New York, December 14.

Society of the Plastics Industry, reinforced plastics division conference Edgewater Beach hotel, Chicago, February 6-8; annual western section conference, del Coronado hotel, Coronado, Calif., April 4-6.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, January 9.

Toilet Goods Association, joint convention with Toilet Goods Manufacturers Association of Canada, Chateau Frontenac, Quebec City, Canada, June 24-29.

Weed Society of America, annual meeting, Jefferson hotel, St. Louis, Mo., December 11-14.

Washington Talks It Over

A Milk Pricing Case Before the Supreme Court Is More Than a Mere Case Involving Milk; It Is a Case Involving Chemicals and Their Entire Future, as Well.

By Ralph L. Cherry
Washington Editor

New rules affecting pricing practices in the chemical industry often have their origin in areas quite apart from the industry itself.

Therefore, when the government seeks a clarification of the Robinson-Patman anti-price discrimination law, it is usually of more than passing interest to chemical producers.

And when the issue involves possibly an entirely new concept of the law's intent, it is then time for the industry to pay close attention.

Such may be the case in a dispute between the government and a couple of Chicago milk distributors that has just moved up the ladder to the US Supreme Court for final judgment.

Twenty-five years ago when congress was drawing up the anti-price discrimination law, as a concession to the opposition, the proponents included a provision stating that nothing in the law should prevent sellers from charging different prices to competing customers based on differences in costs of doing the business.

Court records are replete with cases involving this law, ranging all the way from questions of unwarranted rebates for preferred customers up to the rights of sellers to discriminate in good faith so that they can meet the lower price offerings of a competitor.

But at no time until now has the issue come up involving this so-called cost justification clause in the law. The outcome could be as important as the issue of the "good faith" clause of a few years back.

In the present case, Borden Company and Bowman Dairy Company are accused by the government of violating the law by selling milk to chain stores in the Chicago area cheaper than to the independent food stores. The two companies were following an arbitrary discount pricing system based on a study of doing business with chains and other types of customers.

The government is objecting to the use of averages. It claims that the dairies proved only that sales to all chain stores are less costly "on the average" than sales to independents. But it says this is not reason enough, because by this reckoning, an independent would never be on an equal footing with a chain operator.

The government was unable to make its arguments stick in the lower courts, which found that although the prices were discrimination on their face, they were lawful under the cost justification clause. At the government's urgings, the Supreme Court has decided to look into the matter.

DIXON'S NEW HYDROFLUORIC ACID PLANT FIRES UP AT PAULSBORO, N. J.!

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Current MARKET Quotations

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dms., l.c.l., frt. alld ..... lb. .13½- —
tanks, frt. alld ..... lb. .10 - —
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Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32¼- —
bbls., bgs. ton lots, frt. alld. lb. .33¼- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms. any quantity lb. .90 - —
100-lb. dms., any quantity lb. .92 - —
Acetic acid, comi., or redist., 28%, bbls 100 lbs. 4.80 - —
56%, bbls. ..... 100 lbs. 8.25 - —
70%, bbls. ..... 100 lbs. 9.95 - —
80%, bbls. ..... 100 lbs. 10.45 - —
glacial, syn., CP, dms., c.l., divd. E 100 lbs. 18.75 - —
tech., dms., c.l., divd. E. 100 lbs. 13.75 - —
dms., l.c.l., divd. E ... 100 lbs. 15.25 - —
tanks, divd. E ... 100 lbs. 10.00 - —
USP, tanks, divd. E ... 100 lbs. 13.00 - —
Acetic anhydride, aluminum ret. dms., c.l., divd. E lb. .16½- —
aluminum ret. dms., l.c.l., divd E. lb. .18 - —
tanks, divd. E. lb. .14 - —
Acetic anhydride prices 1c. higher in West.
Acetoacetanilide, fib. dms., c.l., divd lb. .70 - —
fib. dms., l.c.l., divd. lb. .71½- —
Acetoacet-o-chloroanilide, fib. dms., c.l., divd lb. 1.25 - —
fib. dms., l.c.l., divd ... lb. 1.26 - —
Acetoacet-o-toluidide, fib. dms., c.l., divd lb. .73 - —
fib. dms., l.c.l., divd ..... lb. .74½- —
Acetone, CP, dms., c.l., divd .. lb. .09½- —
dms., l.c.l., divd ..... lb. .11 - —
tanks, divd. ..... lb. .07 - —
Acetonitrile, dms., c.l., frt. alld lb. .37½- —
dms., l.c.l., frt. alld ..... lb. .39 - —
tanks, frt. alld ..... lb. .35 - —
Acetophenetidin, USP, powd., 200-lb. dms., 1,000 lbs., frt. alld lb. 1.20 - —
100-lb dms. 1,000 lbs., frt. alld. lb. 1.22 - —
Acetophenone, cns. dms ..... lb 42 1.30
Tech., dms., c.l., works ..... lb. .32½- —
dms., l.c.l. works ..... lb. .34 - —
tanks, works ..... lb. .30 - —
N-Acetyl-p-aminophenol, dms., t.l. (min 23,000 lbs.), frt. adjusted lb. 1.30 - —
dms., 1,000-lb. lots, same basis lb. 1.40 - —
dms., 100-lb. lots, same basis lb. 1.54 - —
Acetylene black, tmp., bgs., c.l., duty and freight extra lb. .20 - —
cs., l.c.l., ex whse lb. .25½- .31
Acetylene tetrabromide, 16-dm. lots or more, f.o.b. works lb. .53 —
Acetylsalicylic acid, USP, cryst. (20, 40 mesh), powd (80 mesh). 250-lb dms., c.l., pt. of shipt lb. .56¼- —
USP 10% starch granulation, 12-50 mesh, white, 250-lb. dms., c.l., same basis lb. .56¼- —
(Pink and green granulations 5c. per lb higher.)
Freight equald. shipt. identical quantity over standard routes, from N.Y., Phila., Midland, Mich., Chicago and St. Louis
Acetyltributyl citrate, tech., non-ret dms. c.l., frt. alld. E of Denver lb. .34 - —
non-ret. dms., l.c.l., same basis lb. .36 - —
tanks, same basis lb. .31½- —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .38 - —
non-ret dms., l.c.l., same basis lb. .40 - —
tanks, same basis ..... lb. .35½- —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls lb. .50 .55
Acrolein, tech., dms., c.l., works lb .36 - —
dms., l.c.l., works ..... lb. .36¾ - —
tanks, works ..... lb. .31 - —
Acrylamide, dms., t.l., f.o.b. works. lb. .58 - —
dms., t.t.l., same basis ... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., divd lb. .42½- —
dms., l.c.l., t.t.l., divd ... lb. .43½- —
tanks, divd. ..... lb. .40 - —
tech., esterification, tanks, frt. alld lb. .38 - —

Abies Siberica Oil—Ammonium Bromide

Acrylic acid, tech., polymerization, tanks, same basis lb. .38 - —
Acrylonitrile, dms., c.l. t.l., works lb. .17½- —
dms., l.c.l., t.t.l., same basis .... lb. .18½- —
tanks, same basis ..... lb. .14½- —
Adeps lanae (see lanolin).
Adipic acid, bgs., c.l., divd..... lb. .29 - —
bgs., l.c.l., divd. ..... lb. .31¾- —
Agar, USP, Kobe No. 1, strip, bls. lb. 2.60 - 2.30
powd., 30 mesh., fib. dms lb. 2.40 - 2.60
dl-Alanine, dms., 100-lbs or more, f.o.b works lb 5.25 - —
dms. 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .28 - —
Aldrin, tech. fib. dms. c.l., t.l. divd lb. .99 - —
fib dms. l.c.l. divd lb 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs ..... lb 1.50 - 1.75
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue dry, 250-lb. bbls., divd. E. of Rockies lb. 2.43 - —
Alkali blue prices 1c. higher W. of Rockies
Allethrin, 90%, dms., frt. alld lb. 28.80 - 28.90
Soln., 20%, dms., 200-2,000 lb lots, frt alld lb. 6.50 6.55
2½% dms. frt alld. lb. .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol, dms., c.l. divd. lb. .32½- —
dms., t.c.l., divd. lb. .34 - —
tanks, divd. lb. .30 - —
Allyl bromide 55-lb cbys 5,005 lbs or more, works lb 1.50 - —
55-lb. cbys., 1,045 to 4,[illegible] lbs works lb. 1.55 - —
55-lb. cbys., 55 to 990 lbs works lb. 1.60 - —
Allyl chloride, dms., c.l., divd lb 17½- —
dms., t.c.l., divd ..... lb. .19 - —
tanks, divd ..... lb. .15 - —
Allyl isothiocyanate (see Mustard Oil, syn.).

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	No.	number
amorph	amorphous	djns.	demijohns	nom.	nominal
AMP	American melting point	dlvd.	delivered	o-	ortho
anhyd.	anhydrous	dms.	drums	ord.	ordinary
AOAC	Association of Official Agricultural Chemists	dom.	domestic	oz	ounce
		E.	east	p-	para
		e.p.	end point	Pac.	Pacific
a.p.a.	available phosphoric acid	equald.	equalized	pf.	proof
approx.	approximately	exp.	expressed	phos.	phosphate
artif.	artificial	Ext.	external	photo.	photographic
ASTM	American Society for Testing Materials	F.	fahrenheit	pkgs.	packages
		ferment.	fermentation	powd.	powdered
Atl.	Atlantic	f.f.a.	free fatty acid	precip.	precipitated
Be.	Baume	f.f.c.	free from chlorine	prod.	producer
bbls.	barrels	fib.	fiber	pt	point
bgs.	bags	f.o.b.	free on board	pulv.	pulverized
bls.	bales	f.p.a.	free of prussic acid	purif.	purified
bots.	bottles	frt.	freight	redist.	redistilled
b.p.	boiling point	gal.	gallon	refd.	refined
b.p.l.	bone phosphate of lime	gran.	granular	refy.	refinery
b.r.	boiling range	grd.	ground	reg.	regular.
bxs.	boxes	i.&a.	iron and aluminum	resub.	resublimed
C.	centigrade			ret.	returnable
cbys.	carboys	t.b.p.	initial boiling point	SD	specially denatured
CD	completely denatured	imp.	imported	s.d.	single distilled
c.i.f.	cost, insurance, freight	incl.	included	S E.	southeast
cks.	casks	indust.	industrial	sec.	secondary
c.l.	carlots	kgs.	kegs	secs	seconds
cns.	cans	l-	laevo	s.g.	specific gravity
coml.	commercial	lacq.	lacquer	shipt.	shipment
conc.	concentrated	lb.	pound	soln.	solution
CP	chemically pure	l.c.l.	less carlots	s.u.	standard unit
cps.	centipoises	l.t.l.	less truckload	syn.	synthetic
cryst.	crystalline	liq.	liquid	tanks.	railroad tankcars
cs	cases	mfrs.	manufacturers	tech.	technical
ctns.	cartons	m-	meta	tert-	tertiary
cyls.	cylinders	m.a.p.	mixed aniline point	t.l.	truckloads
d-	dextro	min.	minimum	t.w.	tankwagons
dbl.	double	m.p.	melting point	USP	U S Pharmacopoeia
denat.	denatured	N-	nitrogen	vis.	viscosity
dest-dist.	destructively—distilled	n-	normal	VM&P	varnish makers & painters
dl-	dextro-laevo	nat.	natural	W.	west
dist.	distilled	neut	neutral	whse.	warehouse
		NF	National Formulary	w.w	water-white
		NNR	New and Nonofficial Remedies		

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Almond oil, artif., bitter (see Benzaldehyde)
Almond oil, nat., bitter, f.p.a., bots. lb 2.75 3.45
NF, bots. ..... lb 3.00 3.30
sweet, USP, cns., dms..... lb 60 70
Aloe, Cape, cs. ..... lb. 33 .40
powd., cs. ..... lb 60 .65
Curacao, kgs. ..... lb 75 —
powd., kgs. ..... lb .85 —
Aloin, USP bbls., dms., kgs .... lb 3.25 3.75
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpinol (see a-Terpinol).
Alphatocopherol (see a-Tocopherol).
Alum ammonium, gran., bgs., c.l., works 100 lbs 4.80 - —
Lump, dms., works 100 lbs. 5.55 - —
Powd., dms., works 100 lbs. 5.70 - —
Alum potassium, gran., bgs., c.l., works 100 lbs. 5.05 - —
Lump, dms., works 100 lbs. 5.80 - —
Powd., dms., works 100 lbs. 5.95 - —
Alum, potash-chrome dms lb. .17 —
Alumina, calcined bgs. c.l. works. lb. .0530- —
bgs., l.c.l., works lb. .0655- .0830
Aluminum acetate, basic, fib. dms., l.c.l. works lb. .54 - —
Aluminum chloride coml. anhyd., dms., c.l., works frt equald lb. .16 —
dms. l.c.l. works lb. 16½- —
crvst., dms. c.l works 100 lbs 21.00 —
dms., l.c.l. works 100 lbs. 21.50 —
Soln., 32° cbys. c.l., works lb 0495- —
cbys., l.c.l., works lb .0570- .1093
tanks, works 100 lbs. 3.95 —
NF, gran. dms. works lb. .31 .33
Aluminum fluoride tech., anhyd., bgs., c.l. works lb. .16¼ —
bgs., l.c.l. works lb. .17¼ 19¼
bulk, c.l. basis 80% lb. .14½ —
Aluminum fluoride in fib. dms. 0.35c per lb higher
Aluminum formate, basic soln., containers extra c.l. works. 100 lbs. 11.00 - —
containers extra l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate heavy, bgs., c.l., frt. equald lb. .0370- —
bgs., 20,000-40,000 lb lots, same basis lb. .0395- —
bgs., 2,000-20,000 lb lots, same basis lb. .0495- —
bulk c.l. same basis lb. .0330- —
Light, bgs., c.l. t.l. works lb. .08 —
bgs., t.l., to c.l., works lb. .09 —
bgs., l.t.l., works lb. .10 —
Aluminum hydroxide, dried, USP XV fib dms. works lb. .82½ —
fib dms. contract works lb. 79½ —
gel, pharmaceutical, 14-15% Al_2O_3, fib dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms. works. lb. .19 —
fib dms. contract works lb. .18 - —
Aluminum hydroxide tech. powd., (see Aluminum hydrate)
Aluminum metal, 99½% + 30-lb ingots, 10,000-lb lots, frt. alld lb. .2610- —
50-lb pigs 10,000-lb lots frt allid. lb. .24 - —
Aluminum oxide, amorphous (see Alumina, calcined)
Aluminum paste lining, extra-fine, 200-lb drum dlvd lb. .70 - —
Standard lining, dry lb. .47½- —
Aluminum powder lining extra-fine, 250-lb drum dlvd lb 1.12 - —
Standard lining, dry lb. .82 - —
Aluminum resinate precip., 2.1% Al, dms lb. .45 —
Aluminum stearate, dibasic, ctns., c.l lb. .39 —
ctns., l.c.l. ..... lb. .40 44
Monobasic, ctns., c.l. ..... lb. .39 —
ctns., l.c.l. ..... lb. .40 44
Tribasic ctns. c.l. ..... lb. .39 —
ctns., l.c.l lb .40 44
Aluminum sulfate, coml., grd., bgs c.l., works, frt equald ton 41.00 —
bulk c.l., same basis ton 40.00 - —
lump, bgs., c.l., same basis ton 44.00 - —
iron-free, bgs. c.l., works, frt equald 100 lbs 3.80 —
bgs. l.c.l., works frt equald. 100 lbs. 4.30 8.30
USP, gran., 400-lb dm. works. lb. .30 —
USP, powd., dms works lb. .27 —
Aluminum sulfate prices $1 per ton higher in the South
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots oz. 6.50 - 10.00
p-Aminoacetanilide, tech., paste, dms., frt. alld lb 1.57 —
Aminoacetic acid, NF, bbls., frt. adjusted lb 1.35 1.60
Aminoazotoluene base, bbls 100% basis lb 1.15 1.18
p-Aminobenzoic acid, tech, dry, dms works lb 1.72 —
2-Amino-4-chlorophenol, tech, solid, dms., frt. alld lb 2.15 3.85
p-Aminodiphenylamine, tech, solid, dms frt allid lb 3.00 —
Aminoethyl ethanolamine, dms., c.l., divd lb. .475 - —
dms., l.c.l., divd lb. .49 - —
tanks, divd. lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt allid lb. .44 - —
dms., l.c.l., frt. allid. lb. .45 - —
tanks, frt. allid. lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb 2.05 - —
dms. smaller lots. lbs. 2.50 - —
p-Aminophenol, dms., frt. allid. lb. 1.25 - —
Aminophylline, USP, 100-lb. dm., frt allid lb 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt equald, E. of Rockies ton 92.00 - —
refrigeration, tanks, works, frt equald, E. of Rockies ton 94.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E of Rockies ton 95.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal., gray, bgs., c.l works, frt equald 100 lbs 8.25 —
bgs. l.c.l., same basis 100 lbs. 8.65 - 12.65
Ammoniac, sal., white (see Ammonium chloride, tech.)
Ammonium acetate, purif., dms lb. .43 - —
Ammonium benzoate, USP, 100-lb. dms., 1,000-lb lots, works lb 1.90 - —
Ammonium biborate, gran., dms. c.l., works ton 325 - —
dms., ton lots, ex whse 100 lbs. 22.88 - —
dms., smaller lots, ex whse 100 lbs. 24.11 - —
Ammonium bicarbonate, dom., dms. c.l., works 100 lbs 7.50 - —
dms., l.c.l., works 100 lbs 9.50 - —
Ammonium bichromate dms. works lb 42 43
Ammonium bifluoride dms divd lb 2145- .2245
Ammonium bromide, NF gran., dms., c.l. t.l. frt equald lb 44 —
dms. l.c.l., same basis lb 46 —

Ammonium Carbonate—Azelaic Acid

Ammonium carbonate, USP, lump, dms. c.l. lb. .15½- —
Ammonium chloride, white tech., fine gran., bgs. c.l. works. 100 lbs 6.00 —
bgs. l.c.l., works 100 lbs 8.00 8.45
USP, gran., 250-lb. dm lb. .20 - —
Ammonium citrate dibasic 250-lb. dm. f.o.b., works lb. .76 • —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride)
Ammonium gluconate tech., 200-lb. dm., f.o.b. works E lb. .45 • —
Ammonium hydroxide (see Ammonia aqeous).
Ammonium iodide, NF, 25-lb. jar, f.o.b. works lb. 4.51 • —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., l.t.l. frt. alld lb .21½- —
tanks, frt. alld lb. .19½- —
Ammonium lignin sulfonate, bgs., bgs, l.c.l., works 100 lbs. 3.75 4.25
bgs., l.c.l., works 100 lbs. 3.40 3.65
Ammonium molybdate, CP, cryst., 400 lb dms., 15,000-lbs works. lb. 1.35 • —
400-lb dms., 2,000-lb contracts, work lb. 1.36 • —
400-lb dms. works lb. 1.37 • —
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bgs., f.o.b. works ton.67.00 • —
Ammonium nitrate, dom., with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.44.00 • —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point frt. equald to $3 ton base price ton.67.00 • —
Ammonium oxalate, tech., fine gran., 250-lb dm. f.o.b works E lb. .28½- —
Tech., powd. 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l. works ton.193.00 • —
bgs., ton lots, ex whse 100 lbs.15.27 • —
bgs., smaller lots, ex whse 100 lbs.16.52 -18.52
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, comi., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Ammonium phosphate, dibasic, NF., V, bbls., dms lb. .46 • —
Dibasic, tech. bgs. c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .12¼- .13¾
Ammonium sulfamate, bgs. c.l., t.l., works lb. .19 — —
bgs. l.c.l. works lb. .20½- .27
Ammonium sulfate standard granular, bulk f.o.b works, base price ton.32.00 • —
Ammonium sulfate, purif., c.l., 100-lb. bgs., f.o.b. works lb. .06¼- —
Ammonium sulfate, large granular, bulk, c.l., works ton.35.00 • —
bgs., c.l., works ton.40.00 • —
Tech., bulk, c.l., t.l., works ton.52.00 • —
bgs., c.l., t.l., works ton.56.00 • —
bgs., l.c.l., t.l., works 100 lbs. 3.20 - 5.20
Ammonium sulfide, liq., 40-44%, tanks, frt. equald., 100% basis. ton.160.00 • —
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst., dms., c.l., works lb. .20 • —
dms. l.c.l., works lb. .22 • .26
Tech, soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycolate, comi., 55-gal. dms., ton lots, 100% basis lb 1.15 • —
d-Amphetamine hydrochloride, monobasic, dms lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic dms lb. 4.50 - 6.00
d-Amphetamine phosphate, 6b. dms., 100-lb. lots lb.15.00 • —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, 6b. dms. lb.15.00 -17.00
dl-Amphetamine sulfate, 6b. dms., lb. 4.20 - 5.60
Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt alld E of Rockies lb. .18½- .19
dms., l.c.l., same basis lb. .20 - .20½
tanks, same basis lb. .16 - .16½
Amyl acetate, ex pentane, reg., dms., c.l., divd lb. .19 - —
dms., l.c.l., divd. lb. .21½- —
tanks, divd. lb. .16½- —
Amyl acetate, tech., dms., c.l., divd. lb. .17 • —
dms., l.c.l., divd. lb. .18¼- —
tanks, divd. lb. .14½- —
Syn., oxo process, dms., c.l., divd. lb. .19 • —
dms., c.l., divd. lb. .20½- —
tanks, divd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., divd lb. .43½- —
refd., ACS grade, dms., l.c.l., divd lb. .45½- —
ex pentane, mixed amyls, dms., c.l., frt. alld lb. .19 • —
dms., l.c.l., frt. alld lb. .20½- —
tanks, frt. alld. lb. .16½- —
Primary, dms., c.l., frt. alld lb. .20¼- —
dms., l.c.l., frt. alld lb. .21¾- —
tanks, frt. alld lb. .17¾- —
Sec-synthetic, dms., c.l., works, frt. alld lb. .19 • —
dms., l.c.l., same basis lb. .20½- —
tanks, same basis lb. .17 • —
Tert-synthetic, dms., c.l., frt. alld, E lb. .22 • —
dms., l.c.l., frt. alld, E lb. .23½- —
tanks, frt. alld. E lb. .19½- —
1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 • —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 • —
dms., l.c.l., works lb. .70 • —
tanks, works lb. .60 • —
Amyl n-butyrate, dms. lb. 1.00 • 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol, dms., c.l., works, lb. .28 • —
dms., l.c.l., works lb. .29 • —
Amyl salicylate, cns., dms. lb. .71 • —
Amyris oil, dms. lb. 1.40 • 1.50
Anethol, tech., dms. lb. .80 • .92
USP, cns., dms. lb. 1.05 • —
Angelica root, bls lb. .50 • 1.00
Angelica root oil, bots lb.120.00 -140.00
Angelica seed oil, bots lb.120.00 -130.00
Aniline, dms., c.l., frt. alld lb. .17 • —
dms., l.c.l., same basis lb. .18 • —
tanks, same basis lb. .15 • —
Aniline oil (see Aniline).
Aniline salt, dms., c.l. t.l., 20,000 lbs. min., frt. alld lb. .33 • —
dms., l.c.l., same basis lb. .35 • —
Anise oil, USP, dms lb. 1.90 - 3.00
Anise seed, Turkish, bgs lb. .30 • —
Spanish, bgs. lb. .40 • —
Anisic aldehyde, dms lb. 1.50 - 2.20
o-Anisidine, dms., c.l., frt. alld lb. .80 • —
dms., l.c.l., same basis lb. .82 • —
tanks, same basis lb. .78 • —
p-Anisidine, dms., works lb. .97 • —
Anthracene, 90-95%, dms., c.l., t.l. f.o.b., works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 • —
Anthranilic acid, 99%, 150-lb. dms., dlvd lb. 1.15 • —
Anthraquinone, 99.5%, bgs., c.l., frt. alld lb. .70 • —
bbls., l.c.l., same basis lb. .73 • —
Electrical grade, bgs., l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines. lb. .32½- —
cs., c.l., mines lb. .33 • —
Antimony oxide, bgs., c.l., frt. alld. lb. .30 • —
bgs., l.c.l., frt. alld lb. .31½- —
Prices of antimony oxide are 2c. higher west of the Rockies.
Antimony sulfide, approx. 65%, bgs., 10,000-lb. lots, divd lb. .23 • —
bgs., smaller lots, divd lb. .24 • .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .44½- —
pails, l.c.l., works lb. .46½- —
Antimony-potassium tartrate, tech., powd., 250-lb., dm., f.o.b. works, E lb. .69½- —
USP, powd., 250-lb. dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 • —
Apricot kernel oil, USP, dms lb. .55 • .70
Arabic gum, amber sorts, 10 bgs. lb. .21 • .23
USP, powd., bbls. lb. .27 • .30
Areca nuts, powd., bbls lb. .18 • .20
Arecoline hydrobromide, NF, bots., tins, 100 oz. or more oz. 4.00 • —
l-Arginine, free base, dms., 10-kilo 5-kilo lots or more kilo.60.00 • —
l-Arginine glutamate, dms., 10-kilo lots or more kilo.64.80 • —
l-Arginine monohydrochloride, dms., 5-kilo lots or more kilo.60.00 • —
Arnica flowers (true Montana), bls. lb. .75 • —
Aromatic petroleum solvents (see Solvent Naphtha, petroleum, aromatic).
Arsenic, crude (95%), bulk, c.l., works lb. .016 • —
bbls., c.l., works lb. .031 • —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls., l.c.l., works lb. .06½- .07¼
Arsenic trioxide, NF, powd., dms., 300-lbs., f.o.b. works lb. 48 • —
Arsenous acid, tech. (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb. 3.70 • —
Light shades, bbls. lb. 2.85 • —
Asafetida gum, cns lb. .36 • .40
Powd., bbls., dms lb. 75 • .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons), mines ton.86.00 • —
7D, c.l. (30 tons), mines ton.75.00 • —
7F, c.l. (30 tons), mines ton.71.00 • —
7H, c.l. (30 tons), mines ton.61.00 • —
7K, c.l. (30 tons), mines ton.50.00 • —
7M, c.l. (30 tons), mines ton.44.00 • —
7R, c.l. (30 tons), mines ton.43.00 • —
7RF, c.l. (30 tons), mines ton.44.00 • —
7T, c.l. (30 tons), mines ton.41.00 • —
7TF, c.l. (30 tons), mines ton.44.00 • —
Asbestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP, dms., 100-kilos. kilo. 5.60 • —
dms., less than 100-kilos kilo. 5.85 • —
Ash, black (see Barium sulfide)
Asphalt, gilsonite, black jet, bgs., c.l., mines ton.47.00 • —
ex-whse, 5 tons or more, N. Y., N. J. ton.93.50 • —
select, brilliant black, 340°-360°F. fusing pt., bgs., c.l., mines. ton.50.00 • —
270°-295°F. fusing pt., bgs., c.l., mines ton.47.00 • —
Petroleum, cut-back, tanks, tank-wagon, refy gal. .09½- —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton.21.00 • —
85-300 penetration, tanks, tank-wagon, refy ton.20.00 • —
Aspirin (see Acetylsalicylic Acid).
Atropine, NF, tins oz. Nom.
Atropine sulfate, USP, bots, 10 oz. lots oz. 5.25 • —
Azelaic acid, bgs., c.l., divd lb. .56 • —
bgs., ton lots, same basis lb. .37 • —

You'll want this new catalog...

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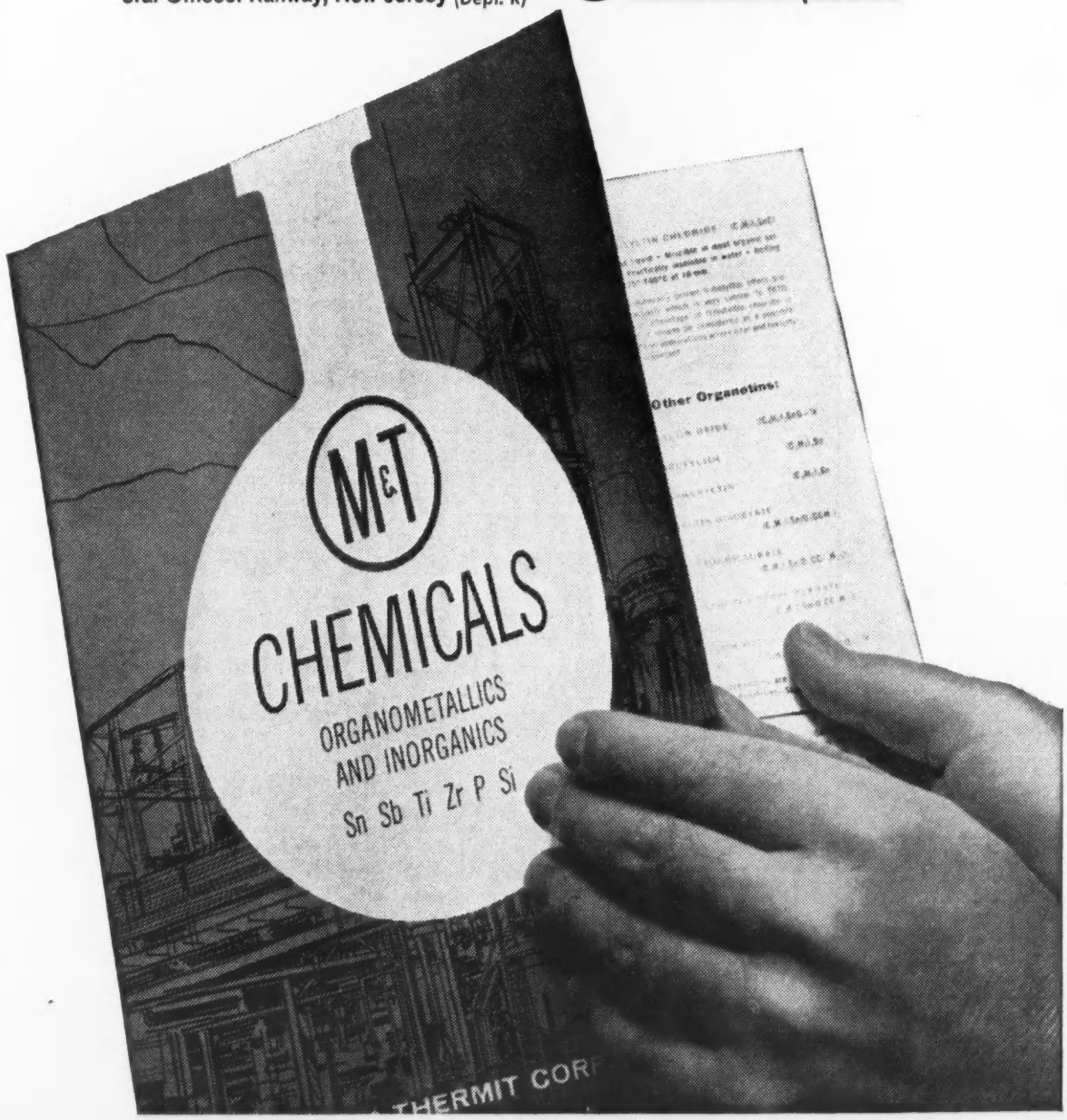
M&T CHEMICALS



B

Bacitracin, sterile, over 500,000,000 units	50,000 units	.90	—
non-sterile, over 500,000,000 units	50,000 units	.85	—
Balm of Gilead buds, dried, bgs.	lb.	1.25	1.35
Barberry root bark, bgs.	lb.	1.00	1.10
Barbital, NF. 100-lb. dms., f.o.b. works	lb.	4.50	—
Barbital sodium, NF. 100-lb. dms.	lb.	4.75	—
Barium carbonate, precip., bgs., c.l., works	ton.	111.50	—
bgs., smaller lots, works	ton.	126.50	—
Barium chlorate, dms., works	lb.	.32	.41
Barium chloride, anhyd., bgs., c.l., works	ton.	176.00	—
bgs., l.c.l., works	ton.	196.00	—
NF, cryst., dms., 400-lbs., works	lb.	.23	—
Tech., cryst., bgs., c.l., works.	100 lbs.	7.00	—
bgs., l.c.l., works	100 lbs.	8.00	—
Barium chromate, bgs., frt. equald.	lb.	.38	—
Barium dioxide (see Barium peroxide).			
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald.	ton.	208.00	—
bgs., l.c.l., t.l.l., frt. equald.	ton.	218.00	—
Barium monohydrate, 99%, bgs., c.l., frt. equald.	100 lbs.	11.25	—
bgs., l.c.l., frt. equald.	100 lbs.	11.75	—
Barium monoxide (see Barium oxide).			
Barium nitrate, bbls., c.l., t.l., dlvd.	lb.	.16	—
bbls., l.c.l., t.l.l., dlvd.	lb.	.17	—
Barium oxide, grd., dms., c.l., t.l., frt equald.	ton.	275.00	—
dms., l.c.l., t.l.l., frt. equald.	ton.	285.00	—
Barium peroxide, dms., frt. equald.	lb.	.90	—
Barium stearate, ctns., c.l., frt. alld.	lb.	.41	—
ctns., l.c.l., same basis	lb.	.42	.46
Barium sulfate, tech. (see Barytes and blanc fixe).			
Barium sulfate, X-ray, 100-lb. dm.	lb.	.19	—
Barium sulfide, dms., c.l., works.	ton.	100.00	—
dms., l.c.l., works	ton.	110.00	—
Barytes, southern, off-color, bgs. mines	ton.	35.00	—
95-75%, bgs., mines	ton.	30.00	—
white, water-grd., paper bgs., c.l. St. Louis	ton.	60.00	60.25
paper bgs., ex whse., New York	ton.	84.85	—
Battery acid, cbys., c.l., works	100 lbs.	2.35	—
cbys, l.c.l., works, E	100 lbs.	2.65	10.95
Bauxite, bulk, mines	ton.	7.00	10.00
Bay oil, NF, Puerto Rican 50-55%	cns.	lb.	3.75 —
NF, Dominica, 50-55%, cns.,	dms.	lb.	3.60 4.50
Bayberry wax, bgs	lb.	.65	70
Beeswax, crude, African, bgs.	lb.	.53	.54
Brazilian, bgs.	lb.	.57	.58
Central American, bgs.	lb.	.55	.56
Chilean, bgs.	lb.	.59	Nom.
Refd., USP, bleached white, bricks 100-lb ctns	lb.	.67	.69
white, slabs, 100-lb. ctns.	lb.	.66	.68
yellow, bricks, 100-lb. ctns.	lb.	.60	.62
yellow, slabs, 100-lb. ctns.	lb.	.59	.61
Belladonna leaf, bls.	lb.	.25	.30
Belladonna root, bls.	lb.	.35	.38
Bentonite, dom. 200 mesh, bgs., c.l., mines	ton.	14.00	—
Bentonite, imp., Italian, white high gel., bgs., 5-ton lots, ex-whse.	ton.	95.20	—
bgs., 1-ton lots, ex whse	ton.	99.00	—
Imp. Italian, white, low gel bgs., 5-ton lots, ex whse	ton.	93.40	—
bgs., 1-ton lots ex whse	ton.	97.16	—
Benzal chloride cbys., works	lb.	.44	—
Benzaldehyde, NF, dms.	lb.	.74	—
Tech., dms., c.l., t.l.	lb.	.42	—
dms., l.c.l.	lb.	.44	—
Benzene, industrial or nitration, tanks, works:			
Baton Rouge, La.	gal.	.31	—
Bethlehem, Pa.	gal.	.31	—
Birmingham district	gal.	.31	—
Chicago district	gal.	.31	—
Cleveland district	gal.	.31	—
Geneva, Utah	gal.	.31	—
Houston, Tex.	gal.	.31	—
Johnstown, Pa.	gal.	.31	—
Lackawanna, N. Y.	gal.	.31	—
Lone Star, Tex.	gal.	.31	—
Lorain, Ohio	gal.	.31	—
Mennequa, Colo.	gal.	.31	—
Middletown, Ohio	gal.	.31	—
Philadelphia district	gal.	.31	—
Pittsburgh district	gal.	.31	—
Port Arthur, Tex.	gal.	.31	—
St. Louis, Mo. District	gal.	.31	—
Sparrows Point, Md.	gal.	.31	—
Syracuse, N. Y.	gal.	.31	—
Terre Haute, Ind.	gal.	.31	—
Youngstown, Ohio	gal.	.31	—
Benzene hexachloride 25% and 99% gamma isomer (see Lindane).			
Benzene hexachloride, tech., high gamma, bgs. c.l. t.l. consignment, dlvd. gamma-unit		.0075	—
bgs., c.l. t.l., direct sale, f.o.b. works gamma-unit		.0065	—
Tech., low gamma, bgs., c.l., t.l., consignment dlvd gamma-unit		.0075	—
bgs., c.l. t.l., direct sale, f.o.b works gamma-unit		.0056	—
Benzidine hydrochloride, bbls., c.l. frt alld. 100% basis	lb.	1.19	—
bbls., l.c.l., same basis	lb.	1.21	—
Benzidine sulfate, tech., bbls., frt. alld., 100% basis	lb.	1.21	—
Benzidine yellow, AAA, bbls., dlvd	lb.	2.20	—
AAOT, bbls., dlvd.	lb.	2.55	—
Lightfast, bbls., dlvd.	lb.	3.40	—
Benzocaine, dms., 100-lbs., frt alld	lb.	3.25	—
Benzoic acid, tech., dms., c.l., t.l., frt. alld	lb.	.30	—
dms., l.c.l., l.t.l., same basis	lb.	.24	—
USP, bbls., dms., ton lots	lb.	.48	—
bbls., dms., 1,000-lb lots	lb.	.50	—
Benzoic acid in bags, ½c. lower.			

BENZOL

Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Interested personal service—always—when you buy from Eastman

Eastman Aldehydes

acetaldehyde
pharmaceutical raw material
denaturant
chemical intermediate

crotonaldehyde
denaturant
chemical intermediate
specialty solvent

propionaldehyde
chemical intermediate
resin raw material
elastomer intermediate

n-butyraldehyde
chemical intermediate
plastic intermediate
pharmaceutical intermediate

isobutyraldehyde
pharmaceutical intermediate
resin raw material
chemical raw material

For properties and shipping information on these and other Eastman products, see Chemical Materials Catalog, page 225, or Chemical Week Buyers' Guide, page 113.

Re expense item: Excess Baggage Charge - $22.

"It just didn't occur to me when I filled it out, but I can see why the item raised eyebrows in the Accounting Department," said one of our Materials Handling Supervisors. "So, prompted by their *more details* memo, I resubmitted the expense account in question with a notation as follows:

"For a one-day round-trip service call the amount indicated would appear excessive as far as personal articles are concerned. Actually my suitcase was full of steel fittings...intended for use in unloading a 10,000 gallon tank car of acetaldehyde. Subject tank car was shipped to customer for October 9 arrival. On October 10 customer telephoned that at start of unloading operation considerable leakage occurred in discharge connections. While all tank car unloading connections were carefully checked before shipment, we felt it advisable to provide on-the-spot assistance, especially since 15 psi. inert gas pressurized unloading of acetaldehyde was a new procedure for this particular customer. As it turned out the leakage was not caused by faulty fittings, but improper hook-up which was quickly remedied, allowing discharge to proceed routinely. It was then necessary to bring back the extra fittings, thus incurring a double-up excess baggage weight charge, which accounts for the unusually high expense item."

While this story indicates the eternal vigilance of our Accounting Department and their constant effort to control the cost of doing business, we think it serves to illustrate a more important point. That is, the cost of the trip itself was *not* questioned...because it came under the heading of *customer service.*

Eastman CHEMICAL PRODUCTS, INC., KINGSPORT, TENNESSEE, Subsidiary of Eastman Kodak Company

SALES OFFICES: Eastman Chemical Products, Inc., Kingsport, Tennessee; Atlanta; Boston; Buffalo; Chicago; Cincinnati; Cleveland; Detroit; Greensboro, North Carolina; Houston; Kansas City, Missouri; New York City; Philadelphia; St. Louis.
Western Sales Representative: Wilson & Geo. Meyer & Company, San Francisco; Los Angeles; Portland; Salt Lake City; Seattle.

Benzoin gum, Sumatra, cs. ..... lb. .32 · —
Benzophenone, dms ..... lb. 1.35 · 1.40
Benzotriazole, tech. dms., 1,000-lb lots, works lb. 1.95 · —
Benzotrichloride, cbys., 1,000-lb. lots or more, frt. equald. lb. .21 · —
cbys., smaller lots, frt. equald lb. .23 · —
Benzoyl chloride, cbys. dms., c.l., works, frt. equald lb. .22 · —
cbys., t.c.l., same basis lb .23 · —
tanktrucks, dlvd Metropolitan area lb. .21 · —
Benzoyl peroxide, purit., fib. dms., 50 to 1,000-lb lots, works lb. .98 1.08
Benzyl acetate, t.f.c. cns. dms lb. .54 · —
Benzyl alcohol, NF, dms. lb. .54 · —
Tech dms. dlvd lb. 47½- .65
Benzyl benzoate USP 40-lb dms. lb. .62 · —
Benzyl chloride, tech., dms., c.l., f.o.b. frt. equald lb. .23 · —
dms., t.c.l., same basis lb. .24 · —
tanktrucks, dlvd., Metropolitan area lb. .21 · —
Benzyl cinnamate, cns. lb. 3.80 · 4.00
N-Benzyl-N,N-dimethylamine, 50 dms., frt. alld lb. 1.25 · —
12-49 dms., same basis..... lb. 1.35 · —
1-11 dms., same basis..... lb. 1.90 · —
Benzyl formate, cns. ..... lb. 1.70 · 1.85
Benzyl isoeugenol, cns..... lb. 8.20 · 8.30
Benzyl propionate, bots..... lb. 1.30 · 1.35
Benzyl salicylate, bots ..... lb. 1.50 · 1.85
Benzylidine acetone, bots ..... lb. 1.65 · 1.75
Benzylidine chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 56.50 · —
Berberine hydrochloride, bots. . lb. 56.50 · —
Bergamot oil, nat., NF, Italian, cns. lb. 11.00 -12.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).
Betamethylnaphthalene (see Methylnaphthalene).
Betanaphthol (see b-Naphtol).
Betanaphthylamine (see b-Naphtholamine).
Betaoxynaphthoic acid (see b-Oxynaphthoic acid).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, tech.).
Biotin cryst., bots ..... gram 10.00 · —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns..... lb. 1.50 · 1.90
Rectified, cns. ..... lb. 1.75 · 2.00
Bismuth chloride tars ..... lb 5.11 —
Bismuth hydroxide dms ..... lb 4.60 4.65
Bismuth metal bxs, ton lots lb 2.25 · —
Bismuth nitrate, cryst., 200-lb. dm. works lb. 2.25 · —
Bismuth oxychloride, 25-lb. dm., f.o.b. works lb. 4.92 · —
Bismuth subcarbonate, USP, 25-lb. dm., f.o.b., works lb 3.70 · —
Bismuth subgallate, NF, 200-lb dm., f.o.b. works lb 3.98 · —
Bismuth subiodide, fib dms lb 5.37 · —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b., works lb. 3.10 · —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b. works lb. 4.15 · —
Bismuth trioxide, 100-lb. dms., f.o.b. works lb. 4.40 · —
Bismuth-ammonium citrate, USP, powd., jars lb. 4.23 · —
Bisphenol-A, bgs., c.l., t.l., single shipt., 76,000-lbs. or more, frt. alld lb. .30½- —
bgs., c.l., t.l., less than 70,000-lbs., same basis. lb. .31 · —
bgs., t.c.l., same basis ..... lb. .32½- —
Blackberry root bark, bls..... lb. .50 · .55

BLACK PIGMENTS

Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton. 160.00 · —
bgs., t.c.l., works ton. 170.00 · —
bgs., t.c.l., New York whse ton. 215.00 · —
Blood dried, 16-16½% ammonia, bgs., New York unit-ton. 5.50 · —
Bloodroot, bls. ..... lb. .80 · .85

BLUE PIGMENTS

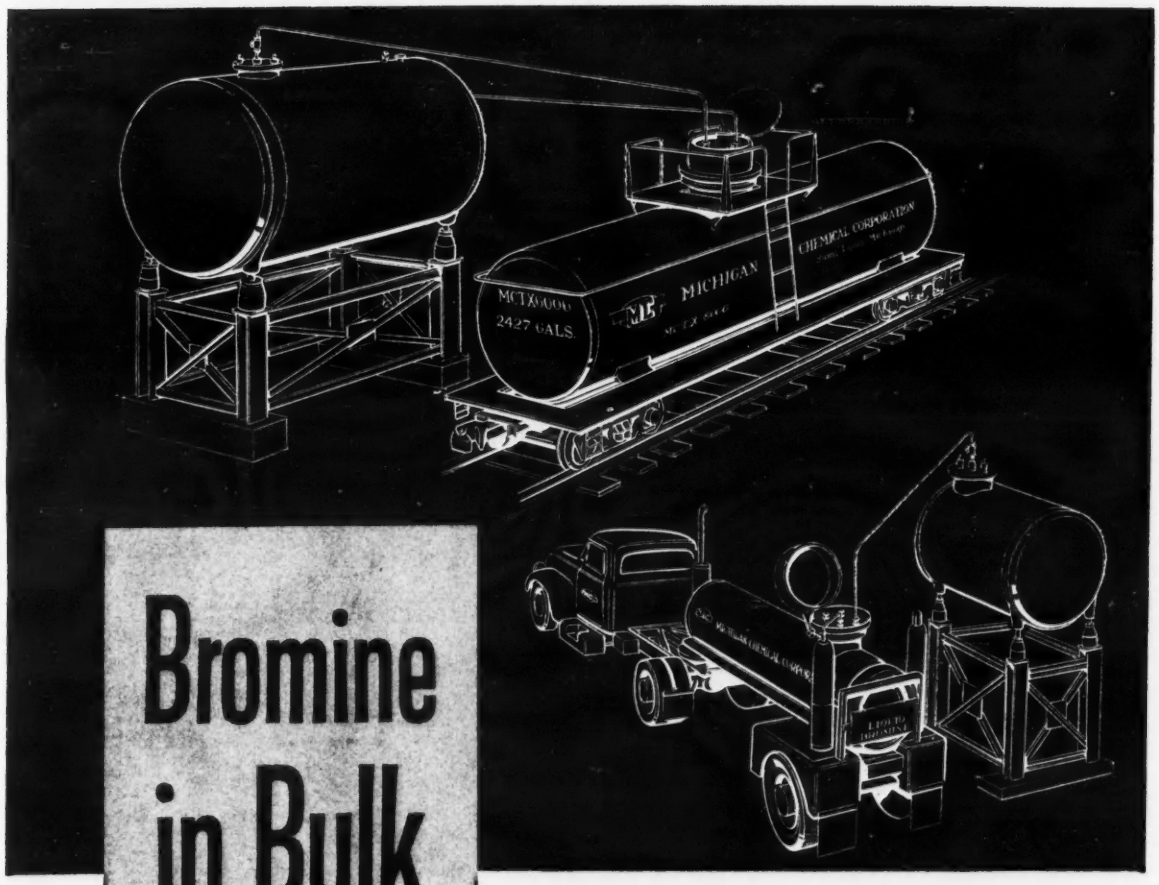
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate).
Bois de rose oil, Brazilian, dms..lb. 1.90 · —
Peruvian, dms. ..... lb. 1.65 · —
BON acid maroons, pure, bbls..lb. 1.75 · —
Resinated, bbls. ..... lb. 1.50 · —
Bonemeal, steamed, works, E. . ton. 100.00 · —
Bone black, dms., c.l., frt. alld. lb. .1750- .2250
t.c.l., works ..... lb. .1950- .2450
Pacific coast bone black prices 3¼c. per lb. higher.
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99%, bgs., c.l., works ton. 92.00 · —
bgs., ton lots, ex whse, New York or Chicago..100 lbs. 7.67 · —
bgs., smaller lots, same basis..100 lbs. 8.91 -10.91
bulk, c.l., works ..... ton. 83.00 · —
Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works ton. 50.00 · —
bgs., ton lots, ex whse, New York or Chicago..100 lbs. 5.31 · —
bgs. smaller lots same basis 100 lbs. 6.56 · 8.56
bulk, c.l., works ton. 43.50 —
Tech., pentahydrate, 99½%, bgs., c.l., works ton. 64.50 · —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 6.12 · —
bgs. smaller lots same basis 100 lbs. 7.37 · 9.37
bulk, c.l., works ton. 58.00 —
USP, powd., bgs. c.l., works ton. 54.00 · —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.57 · —
bgs., smaller lots, same basis 100 lbs. 7.82 · 9.82
Bordeaux powder tribasic bgs. c.l., dlvd lb. .24 · —
bgs., t.c.l., same basis lb. .26 · —
Boric acid, tech. anhyd. 99.9% bgs., c.l., works ton. 335.00 · —
bgs. ton lots, ex whse, New York or Chicago 100 lbs. 21.27 · —
Tech, anhyd., 99%, bgs., smaller lots, same basis 100 lbs. 22.52 -24.52
cryst. 99.9% bgs. c.l. works. ton. 163.50 —
Tech., cryst., 99.9%, bgs., ton lots, ex whse., New York or Chicago 100 lbs. 11.67 · —
bgs., smaller lots, same basis. 100 lbs. 12.92 -14.92
Boric acid, tech., cryst., 99.9%, dms., c.l., works ton. 188.50 · —
dms., ton lots, ex whse. New York or Chicago 100 lbs. 13.17 · —
dms., smaller lots, same basis 100 lbs. 14.42 · —
gran., 99.9%, bgs., c.l., works. ton. 112.00 · —
bgs. ton lots, ex whse. New York or Chicago 100 lbs. 8.78 · —
bgs. smaller lots same basis 100 lbs. 10.03 -12.03
dms. c.l. works ton. 137.00 —
dms, ton lots, ex whse. New York or Chicago 100 lbs. 10.29 · —
dms. smaller lots same basis 100 lbs. 11.54 · —
bulk, c.l. works ton. 106.00 · —
powd., bgs., ton lots, ex whse, New York or Chicago 100 lbs. 9.20 · —
bgs., smaller lots. same basis 100 lbs. 10.45 -12.45
dms., ton lots, ex whse., New York or Chicago 100 lbs. 10.71 · —
dms., smaller lots, same basis 100 lbs. 11.96 · —
USP boric acid $25 per ton higher in bags.
Borneol, cns. lb. 2.75 · —
Boron trichloride, CP, 1,800-lb. cyls., works lb. 1.25 · —
100-lb. cyls. works lb. 1.70 · —
Boron trifluoride, gas, cyls., t.l., works lb. .70 · —
cyls., l.t.l., works lb. .70 · —
Brimstone (see Sulfur).
Broenner's acid, bbls ... lb. 1.53 · —
Bromine, purif., cs., c.l., t.l., dlvd. E of Rockies lb. .32 · —
cs., l.c.l., same basis lb. .34 · .39
ret. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 · —
ret. dms., l.c.l., same basis lb. .31 .34
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 · —
dms., l.c.l., same basis lb. .50 · —
tanks, same basis lb. .47 · —
Bromoform, pharmaceutical grade, 5-gal. cby. frt. equald lb. 1.95 · —
Bromstyrol, bots lb 5.25 · 5.35
Brucine, cns. ..... oz. .75 · 1.10
Brucine sulfate, NF, cns. ..... oz. .65 · .85
Buchu leaves, bbls ..... lb. .60 · .65

BROWN PIGMENTS

Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, retd cyls., c.l., refy lb. .21 —
cyls., t.c.l., refy ..... lb. .22 · —
tanks, dlvd ..... lb. .12¾- —
Butene-1 tanks, works ..... lb. .0625- —
Butene-2, tanks, works ..... lb. .05¾0- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 · —
dms., t.c.l., same basis lb. .18½- —
tanks, same basis ..... lb. .14½- —
Syn., dms., c.l., dlvd. E ..... lb. .17 · —
dms., t.c.l., same basis .... lb. .18½- —
tanks, same basis ..... lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾- —
dms., t.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E lb. .37½- —
dms., l.t.l., same basis lb. .38½- —
tanks, same basis lb. .35 · —
n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .18 · —
dms., t.c.l. frt. alld lb. .19½- —
tanks, frt. alld ..... lb. .15½- —
Syn. dms., c.l., dlvd. E ..... lb. .17 · —
dms., t.c.l., frt. alld ..... lb. .19½- —
tanks, frt. alld ..... lb. .15½- —
Sec-synthetic, dms., c.l., dlvd lb. .15 · —
dms., t.c.l., dlvd. lb. .16½- —
tanks, dlvd lb. .12½- —
Tert-synthetic, dms., c.l., frt. alld., dlvd. E lb. .16 · —
dms., t.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½- —
dms., t.c.l., works lb. .38¼- —
n-Butyl ether, dms., c.l., works lb. .35¼- —
dms., t.c.l., works lb. .36 · —
tanks, works lb. .33¼- —
Butyl cyclohexyl phthalate, dms., c.l., frt, alld, E ..... lb. .25 · —
dms., t.c.l., frt. ald. E... lb. .26½- —
tanktrucks, 1,000 - 1,999 gals., same basis ..... lb. .23 · —
tanktrucks, 2,000 gals., same basis lb. .22½- —
Butyl isodecyl phthalate, dms., c.l., frt. alld. E lb. .24½- —
dms., t.c.l., frt. alld. E. lb. .26 · —
tanktrucks, 1,000 - 1,999 gals., same basis lb. .22½- —
tanktrucks, 2,000 gals., same basis lb. .22 · —



Bromine in Bulk

Saves Dollars! Saves Time!

LOOK AT THESE ADVANTAGES: Thousands of dollars a year can be saved by converting facilities to receive bromine in bulk. For example, with tank car orders, you save 9½¢ a lb. as compared to the drum price; 10½¢ a lb. over bottles. With tank truck orders, you save 7¢ a lb. over drums and 8¢ a lb. over bottle shipments. You will free considerable capital now tied up in container deposits. Finally, you will save both time and money now used in handling the smaller bromine containers.

BULK STORAGE PAYS OFF FAST! If you use as little as 60,000 lbs. of bromine a year, delivered by tank truck, you can save the cost of the necessary 1000 gal. bulk-storage installation in about a year.

Tank cars are available in 60,000 lb. and 100,000 lb. capacities. Tank trucks contain 14,000 lbs. each.

WE CAN SHOW YOU HOW! Our experience in the storage and handling of bromine is extensive and we want to share it with you. If you would like engineering prints, specifications, and technical counsel, get in touch with us. Michigan Chemical also offers you these advantages: A steady, uncommitted supply of bromine at tonnage prices; and a large bromine bulk fleet for prompt service.

Bulk shipments from: El Dorado, Arkansas and Manistee, Michigan. Drums and bottles from Manistee and convenient warehouse locations.

For complete listing of Michigan Chemical products, see your copy of Chemical Materials Catalog or Chemical Week Buyers Guide.

MICHIGAN CHEMICAL CORPORATION

641 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N. Y.

C-59-1

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Butyl lactate, dms., c.l., frt. alld. E. Rockies lb. .42½ - —
dms., l.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½ - —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½ - —
Butyl octyl phthalate, dms., c.l., frt. alld. E. lb. .24½ - —
dms., l.c.l., frt. alld. E. lb. .26 - —
tanktrucks, 1,000 - 1,999 gals., same basis lb. .22½ - —
tanktrucks, 2,000 gals., same basis lb. .22 - —
Butyl oleate, dms., c.l., frt. alld. E. of Rockies lb. .26 - —
dms., l.c.l., same basis lb. .26½ - .27
tanks, same basis lb. .24 - —
Butyl phenylacetate, dms. lb. 4.50 - 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, CP, dms., c.l., frt. alld. E. of Rockies lb. .28½ - —
dms., l.c.l., same basis lb. .29 - .29½
tanks, same basis lb. .26½ - —
tech., dms., c.l., same basis lb. .25¾ - —
dms., l.c.l., same basis lb. .26¼ - .26¼
tanks, same basis lb. .23¾ - —
Butylamine (see Mono-, Di- and Tri-butylamine).
tert-Butylamine, dms., c.l., t.l., f.o.b. works lb. .47 - —
dms., l.c.l., same basis lb. .47½ - —
tc., t.t., same basis lb. .45 - —
Butylated hydroxyanisole, food grade, dms., divd. lb. 4.75 - —
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
1,3 Butylene glycol, dms. c.l., t.l., divd lb. .20½ - —
dms., l.c.l., t.t.l., f.o.b. works lb. .22 - —
tanks, divd lb. .18 - —
p-tert-Butylphenol, bgs., c.l., frt. alld lb. .25½ - —
bgs., l.c.l., same basis lb. .26½ - —
tanks, same basis lb. .23½ - —
Butyraldehyde, dms., c.l., divd lb. .22 - —
dms., l.c.l., divd. lb. .23½ - —
tanks, divd lb. .19½ - —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½ - —
tanks, same basis lb. .32½ - —
Butyric ether (see Ethyl butyrate).
Butyrolactone, dms., c.l., t.l., works. lb. .40 - —
dms., l.c.l., same basis lb. .43 - —
n-Butyronitrile, dms., c.l., divd lb. .56½ - —
dms., l.c.l., divd. lb. .57½ - —
tanks, divd. lb. .54 - —

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld E of Rockies lb. 5.55 - —
Light shade, bbls. same basis lb 4.65 - —
Medium shade, bbls., same basis. lb. 5.30 - —
Medium, light shade, bbls., same basis. lb. 4.90 - —
Orange-red shade, bbls., same basis lb. 4.30 - —
Cadmium CP yellow, all shades, bbls., frt. alld. E. of Rockies lb. 3.02 - —
Cadmium chloride, 400-lb dms., f.o.b. shipping point lb. 1.56½ - —
Cadmium iodide, 25-lb fib dms lb 6.75 7.00
Cadmium metal, ingots or sticks, ton lots, cs. divd lb. 1.60 - —
Cadmium nitrate, purif cryst. 400-lb. dms., less than 5,000 lbs. f.o.b shipping point. lb. .94 - —
400-lb. dms., 5,000 lbs. or more, same basis lb. .90 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.73 - —
Cadmium-mercury lithopone red, dark shade, bbls., frt. alld. E. of Rockies lb. 2.03 - —
Light shade, bbls., same basis lb. 1.80 - —
Cadmium-mercury lithopone red, medium shade, bbls., same basis lb. 1.93 - —
Medium light shade, bbls., same basis lb. 1.88 - —
Maroon shade, bbls., same basis. lb. 2.11 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies lb. 2.84 - —
Orange, bbls., same basis lb. 1.66 - —
Cadmium-selenide lithopone red, orange-red shade, bbls., same basis lb. 1.80 - —
Red, dark shade, bbls. same basis.
Dark shade, bbls., same basis lb. 2.64 - —
Light shade, bbls., same basis lb. 1.96 - —
Medium shade, bbls., same basis. lb. 2.31 - —
Medium light shade, bbls., same basis lb. 2.08 - —
Cadmium-selenide lithopone yellow, all shades bbls., frt alld. E. of Rockies lb. 1.27 - —
Caffeine, NF, citrated, dms., 400-lb. lots or more lb 2.70 - —
USP, syn., cryst., hydrous, dms., 100-lb. lots or more, frt. alld lb. 2.25 - —
hydrous, powd., 150-lb. dms., frt. alld lb. 2.25 - —
USP, syn., cryst., anhyd., powd., dms., 100-lb. lots or more, frt. alld lb. 2.40 - —
Cajuput oil, native, cns. lb. 1.75 2.00
Redist. USP cns lb 1.90 2.10
Calamine USP dms. lb. .34 —
Calamus oil bots lb. 12.00 -20.00
Calciferol cryst., 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate trihydrate fib dms., 100 lbs. or more frt. adjusted lb. 3.10 - —
Calcium bromide NF jars 100 lbs. or more lb. 1.10 - —
Calcium carbide standard generator size, 600-lb dms., c.l., divd ton. 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs. c.l. works ton. 10.50 - —
Chalk, whiting, 325 mesh, bgs., c.l., works ton. 32.00 -34.00
water-grd., ½ to 10 microns. bgs., c.l., works ton. 30.00 —
10 to 20 microns bgs., c.l., works ton. 17.00 -18.00
Precip., dense, bgs., c.l., works. ton. 30.00 -38.50
bgs. c.l., works ton. 45.00 -53.50
medium bgs. c.l., works ton. 38.00 —
bgs. l.c.l. works ton. 48.00 -53.00
Surface treated, bgs., c.l., works. ton. 42.00 -44.00
bgs. c.l., works ton. 57.00 -59.00
ultrafine bgs. c.l., works ton. 117.50 167.50
bgs., l.c.l., works ton. 137.50 -187.50

Calcium chloride, conc., flake or pellet, 94-97%, paper bgs., c.l., works, frt. equald. ton. 39.30 - —
Flake, 77-80%, paper bgs., c.l., works, frt. equald ton. 32.00 - —
Liquor, 40%, tanks, frt. equald. ton. 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald. ton. 38.00 - —
Purif., gran., dms. lb. .27 - —
Solid, 73-75%, dms., c.l., frt. equald ton. 30.50 - —
dms., l.c.l., works, frt. equald. ton. 36.00 -73.00
USP, gran., dms. lb. .32 - —
Calcium chromate, bgs., divd lb. .37 - —
Calcium cyclamate, 100-lb. dms lb. 1.95 - —
Calcium gluconate, USP, AA grade, 100-lb. dm., ton lb. .73½ - —
USP, powd., 100-lb. dm., ton lb. .66½ - —
Calcium hydride, lump, dms. works. lb. 2.20 3.00
Calcium hypochlorite, high test, gran., 45-lb. cs., divd E. of Rockies cs. 27.50 - —
100-lb. dms., same basis dm. 39.50 - —
Calcium hypophosphite, dms. 1,000-lb. lots lb. 1.28 - —
Calcium iodide, 25-lb. jars, works. lb. 4.27 - —
Calcium lactate, NF, dms., f.o.b. works lb. .43 - .46
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms., frt equald lb. .30 - —
Calcium pantothenate, USP, 1 kilo or more kilo. 20.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate).
Calcium phenosulfonate, dms lb. 1.24 - 1.25

Calcium phosphate, dibasic, USP, dihydrate, bgs., c.l., frt. equald 100 lbs. 8.25 - —
Feed grade, 18½% P, bgs., c.l., t.l., Bonnie Fla. frt equald ton. 81.00 - —
bgs. c.l., t.l., f.o.b Texas City works ton 75.50 - —
Feed grade, 21% P., bgs., c.l., t.l., frt. equald ton. 97.65 - —
bgs., t.c.l., frt equald ton. 107.65 - —
Prices of calcium phosphate dibasic in bulk $3 per ton less than bgs., c.l., prices.
Calcium phosphate, monobasic, bgs. frt. equald 100 lbs. 7.45 - —
bgs., smaller lots, same basis 100 lbs 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald 100 lbs. 9.25 - —
bgs., t.c.l., frt. equald 100 lbs. 10.00 - —
Calcium propionate, any quantity, dms., divd E of Rockies lb. .34½ - —
Prices W of Rockies 3c. per lb. more.
Calcium phytate bgs., 50 lbs or more, f.o.b. warehouse N Y lb. .39 - —
Calcium resinate, precip., dms., frt. alld., works lb. .45 - —
Calcium silicate, hydrated, bgs., c.l., works lb. .06½ - —
bgs., l.c.l., works lb. .07 - —

Calcium silicate paint grade (see Wollastonite).
Calcium stearate ctns., c.l. lb .39 —
ctns., l.c.l lb 46 .44
Calomel NF mild, powd, dms. 100 lbs., f.o.b. works lb 4.32 —
NF mild precip., dms., 100 lbs. f.o.b works lb 5.67 —
Camphene 46° m.p. dms incl. c.l. works lb 15 —
dms. incl., t.c.l., same basis lb 16½ —
tanks, same basis lb 12½ —
Camphene chlorinated 67-69% (see Toxaphene)
Camphor, monobromated, NF, dms., kgs lb 3.63 3.70
Camphor, syn., tech., 1 bbl or more lb 45 —
USP, powd., bbls., 1,000-lb. lots lb. .56 - —
bbls., smaller lots lb. .57 - —
tablets, ctns., 1,000-lb. lots. lb. 80 —
ctns., 500-lb. lots lb 81 —
ctns., smaller lots lb 82 —
Camphor oil, sassafrassy, dms. lb. .32 .50
White, dms. lb. .24 .40
Cananga oil, native, cns. lb 5.00 6.50
Rectified, cns. lb 7.25 10.00
Candelilla wax, crude, bgs. lb. .57 - .59
Refd., pure, bgs. lb. .61 - .63
Powdered Candelilla wax 20 to 100 mesh, 3c. higher.

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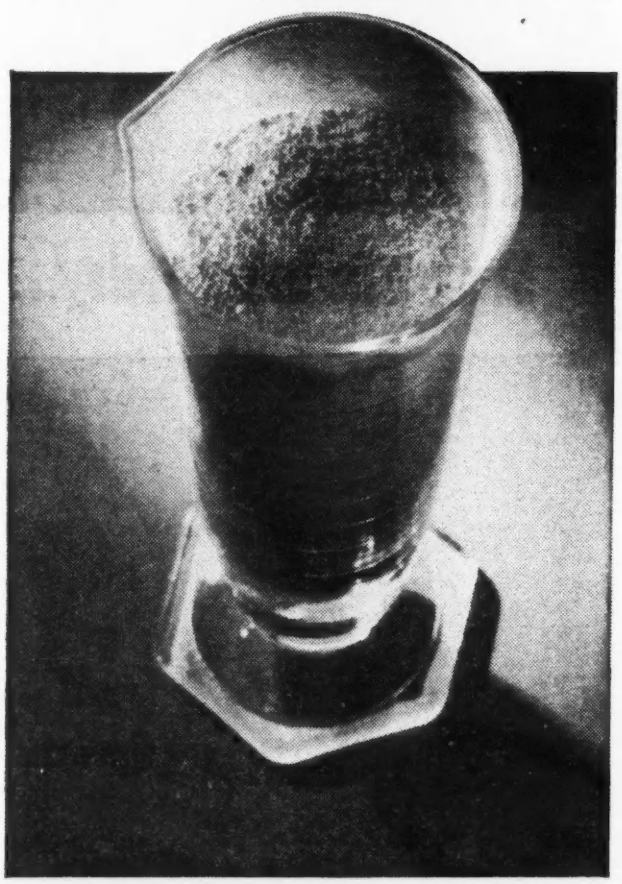
Cantharides—Chicago Acid

Cantharides, Chinese, cs.	lb.	1.50	—
powd. bgs.	lb.	1.75	—
Russian bgs.	lb.	2.25	—
powd. bgs.	lb.	2.50	—
Caprie acid, dms.	lb.	.27¼-	.29¾
tanks	lb.	.24¾-	—
Caprolactam monomer, flake, bgs., c.l., t.l., f.o.b. frt. equald.	lb.	.49	—
bgs., l.c.l., t.t.l., same basis	lb.	.54	—
molten, tanks, same basis	lb.	.46	.462
Caprvl alcohol 85% dms., c.l., t.t., works	lb.	.19	—
dms. t.t.l., same basis	lb.	.19½-	—
tanks, frt. equald.	lb.	.16½-	—
Capryl alcohol, sec., 92-99%, dms., c.l., f.o.b. works	lb.	.22	—
dms. t.c.l. f.o.b works	lb.	.23	—
tanks f o b works	lb.	.19½-	—
Caprylic acid, dms	lb.	.27¼-	.29¾
tanks	lb.	.24¾-	—
Capsicum (see Pepper red)			
Capsicum, oil (see Capsicum oleoresin).			
Capsicum oleoresin NF from dom pepper, dms	lb	4.00	—
NF from African pepper, dms	lb	4.50	—
Caraway oil, NF, dms.	lb.	4.00	4.25
Caraway seed Danish, bgs.	lb.	.16	—
Dutch, bgs.	lb.	.19	—
Carbazole 97%, bbls, ton lots, works	lb.	1.05	—
Carbon black, channel, rubber, beads, bulk, c.l. works	lb.	.08	—
bgs., c.l., works	lb.	.08½-	—
bgs., l.c.l., ex whse. or divd	lb.	.16¼-	—
Carbon black, furnace, fast extruding, bulk, c.l., works	lb.	.06¼-	—
bgs., c.l., works	lb.	.06¾-	—
bgs., l.c.l., ex whse	lb.	.13½-	—
high abrasion, bulk, c.l., works.	lb.	.07¼-	—
bgs., c.l., works	lb.	.07¾-	—
bgs., l.c.l., divd. or ex whse	lb.	.14½-	—
high modulus, bulk, c.l., works.	lb.	.05¾-	—
bgs., c.l., works	lb.	.06¼-	—
bgs., l.c.l., ex whse	lb.	.13	—
semi-reinforcing, bulk, c.l., works.	lb.	.05¼-	—
bgs., c.l., works	lb.	.05¾-	—
bgs., ctns., l.c.l. ex whse	lb.	.12½-	—
pigment, high color beads, bgs. c.l., works	lb.	.78	—
ctns., l.c.l., divd. or ex whse	lb.	.87	—
Carbon black, medium color, uncompressed, bgs., c.l., works	lb.	.14	—
bgs., l.c.l., divd. or whse.	lb.	.22½-	—
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., divd. Metropolitan areas, E	ton.	60.00	-115.00
bulk, 3,000,000 lbs or more, divd Metropolitan areas, E	ton.	55.00	—
Solid, bulk, wholesale, works	ton.	85.00	—
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points	lb.	.071	—
55-gal. dms., l.c.l., same basis	lb.	.086	.091
5-gal. dms., 30 dms to c.l., same basis	lb.	.131	—
5-gal. dms., less than 30 dms., same basis	lb.	.161	—
tanks, f.o.b. works	lb.	.0450-	—
Carbon tetrachloride CP, consumers dms. c.l., frt alld.	lb.	.12¾-	—
dms. l.c.l., frt. alld.	lb.	.15¼-	—
Tech. consumers dms., c.l., t.l., frt. alld	lb.	.11¾-	—
dms. l.c.l. t.t.l. frt. alld	lb.	.14¼-	—
tanks, frt alld	lb.	.10¾-	.11¼
Carboxymethyl cellulose (see CMC).			
Carbromal NF dms. 100-lb lots, works	lb.	4.00	4.25
dms. smaller lots, works	lb.	4.10	4.75
Cardamom oil, NF, bots	lb.	40.00	-43.00
Cardamom seed, bleached "A"	lb.	3.15	—
Bleached "B"	lb.	3.00	—
Decorticated Alleppey, cs	lb.	2.60	—
Guatemala, cs.	lb.	2.45	—
Cardamom, green, Alleppey, bgs.	lb.	1.95	—
Ceylon, bgs.	lb.	2.00	—
Carmine No 40, NF, bulk, 100-lb lots or more, divd.	lb.	16.80	—
bulk, smaller lots, divd.	lb.	16.90	-17.30
Carnauba wax, chalky, bgs., ton lots.	lb.	.56	.58
North Country, No 2, crude, bgs., ton lots	lb.	.64	.65
refd., pure, ton lots	lb.	.72	.74
North Country, No. 3, Ceara, crude, ton lots	lb.	.55	.57
North Country, No. 3, Parnahyba, crude, ton lots	lb.	.57	.59
No. 3, refd., pure, bgs., ton lots.	lb.	.63	.66
Carnauba wax, north country, No. 1, Ceara, yellow, bgs., ton lots	lb.	.88	—
Parnahyba, yellow, bgs., ton lots.	lb.	.90	.93
Powdered carnauba wax, 20 to 100 mesh 8c. per lb. higher.			
Carotene tech., 1,350,000 A units per gram tins, 5-10 kilo lots, divd gram.		.20½-	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units.		.12	—
USP, microcrystalline in oil, 400,000 A units per gram., dms., divd million units.		.144	—
b-Carotene in vegetable oil, semi solid suspension 400,000 A units per gram cns kilo.		57.60	—
b-Carotene liquid in vegetable oil, 500,000 A units per gram cns kilo.		72.00	—
b-Carotene, pure, cryst. 1,600,000 to 1,670,000 A units per gram, cns kilo.		240.00	—
Carvol, bots.	lb.	5.00	5.40
Cascara sagrada bark, bulk	lb.	.32	—
Casein, dom. edible, acid precip., 30 mesh bgs., 10,000-lb. lots or more, works	lb.	.40	—
80 mesh, bgs., 10,000-lb. lots or more, works	lb.	.46	—
Imp., inedible, acid-precip., grd., Argentine bgs. c.l., ex-dock, Eastern seaport	lb.	.18⅜-	.19¼
Australia, same basis	lb.	.20	.20¾
New Zealand, same basis	lb.	.24	.25
Cashewnut shell liquid treated, dms. c.l. Newark N.J	lb.	.24	—
dms. ton lots same basis	lb.	.25	—
t.w. same basis	lb.	22½-	—
Cassella acid dms frt alld., 100% basis	lb	1.44	1.75
Cassia oil, redist., USP, cns	lb	6.50	8.00
Cassia, Padang, "A," bls.	lb.	.28½-	—
"B," bls.	lb.	.27½-	—
"C," bls.	lb.	.25½-	—
Korintje "A," bls.	lb.	.27½-	—
"B," bls.	lb.	.26½-	—
"C," bls.	lb.	.25¼-	—
Castor oil, dom., blown, dms., c.l.	lb.	.2550-	—
dms., l.c.l.	lb.	.2650-	—
Castor oil, dehydrated, bodied, dms., c.l.	lb.	.2710-	—
dms., l.c.l.	lb.	.2860-	—
tanks	lb.	.2510-	—
dehydrated, unbodied, dms., c.l.,	lb.	.2560-	—
dms., l.c.l.	lb.	.2660-	—
tanks	lb.	.2360-	—
hydrogenated, bgs., c.l.	lb.	.2425-	—
bgs., ton lots	lb.	.2625-	—
bgs., l.c.l., divd	lb.	.2625-	—
raw, No. 1, dms., c.l.	lb.	.2200-	—
dms., l.c.l.	lb.	.2300-	—
tanks	lb.	.2000-	—
No. 3, tech., dms., c.l.	lb.	.2125-	—
dms., c.l.,	lb.	.2225-	—
tanks	lb.	.1925-	—
refd., decod., dms., c.l.	lb.	.2-	—
dms., l.c.l.	lb.	.2750-	—
tanks	lb.	.2450-	—
USP, dms., c.l.	lb.	.2250-	—
dms., l.c.l	lb.	.2450-	—
tanks	lb.	.2150-	—
Castor oil, imported, No. 1, Braz., tanks, New York	lb.	.16¼-	—
No. 3, tanks, same basis	lb.	.16	—
Sulfonated, 50%, dms., works	lb.	.15	.15½
75% dms works	lb.	.19	.19½
Castor oil acids, dehydrated, dms.	lb.	.41¼-	.43¾
Split, dms.	lb.	.33¾-	.34¾
Castor pomace, bgs., c.l., works ton		35.00	—
Castoreum nat., cns.	lb	5.25	—
Syn. cns	lb	9.00	—
Catechol CP, cryst., fib., dms., works	lb	2.17½-	—
Resub. dms. works	lb	4.29½	—
Catnip leaves, Southern bls	lb.	Nominal	
Caustic potash (see Potash caustic)			
Caustic soda (see Soda caustic)			
Cedarleaf oil USP XIII cns. dms	lb	3.30	3.50
Cedarwood oil, cns., dms.	lb.	1.10	1.25
Celery seed oil	lb.	12.00	—
Celery seed, French, bgs	lb.	.34	—
Indian, bgs.	lb.	.26	—
Cellulose acetate, flake, powd., bgs., t.l. divd E	lb.	.38	.51
Cellulose acetate-butyrate powd., 17% butyryl content, bgs., divd E	lb.	.545	.555
27% butyryl content, bgs divd, E	lb.	.595	.605
38% butyryl content, bgs. divd, E	lb.	.545	.555
38% butyryl content, half-second, bgs., divd E	lb.	.545	.555
50% butyryl content bgs divd, E	lb.	.585	.595
Cellulose gum, methyl (see Methyl Cellulose)			
Cellulose gum, pure, high vis. bgs., 23,000-lb lots or more works frt alld	lb.	.57	—
bgs., smaller lots, same basis	lb.	.59	—
standard, low or medium vis., bgs., c.l., t.l., frt. alld. E	lb.	.57	—
bgs., ton lots, frt. alld E	lb.	.59	—
(Cellulose gum prices 1c per lb. higher in west.)			
Cerium hydrate 74% CeO, fib dms., 100-lb. lots or more	lb.	1.40	—
77% CeO, fib dms., 100-lb lots or more	lb.	1.74	—
Cerium oxalate (see Rare earth oxalate)			
Cerium oxide, optical grade, bgs., 50-lb lots or more, divd.	lb	1.85	1.90
bgs., smaller lots, divd	lb	2.15	—
Cetyl alcohol NF fib cns., c.l., t.t., divd E	lb.	41½-	—
fib. cns. l.c.l. same basis	lb.	43½-	—
tanks same basis	lb.	39	—
Extra, cns. c.l., t.t., divd E	lb.	48½-	—
fib cns. l.c.l., same basis	lb.	50½-	—
tanks, same basis	lb	46	—
Chalk (see Calcium carbonate)			
Chamomile flowers, Hungarian,	lb.	.95	1.10
Roman, cs.	lb.	1.75	2.00
Chamomile oil, blue Hungarian bots	lb	350.00	—
Charcoal, activated NF, fib dms., c.l., works	lb.	.34	—
fib. dms., 5-ton lots, works	lb.	.35	.35½
fib dms. smaller lots works	lb.	.36	.59
Charcoal, black (see Charcoal activated)			
Charcoal, bone (see Bone black).			
Charcoal, hardwood, lump, bulk c.l., f.o.b. plant	ton.	55.00	—
briquets, bulk, c.l., f.o.b plant	ton.	80.00	—
5-lb. paper bgs., c.l., same basis	ton.	100.00	—
20-lb. paper bgs., c.l., f.o.b plant	ton.	90.00	—
40-lb. paper bgs c.l. same basis	ton.	86.00	—
Chenopodium oil, NF, cns	lb.	4.70	4.90
Chicago acid, paste, bbls., frt. alld	lb.	3.21	—

Predictable enterics start here



This is *Eastman® C-A-P Cellulose Acetate Phthalate*. It could help you launch a new product or liven up an old one. It has helped change big-scale enteric-coating operations from risky to routine. It behaves uniformly and predictably in people, plant, and package.

A *C-A-P* coat withstands prolonged contact with acid gastric juices but dissolves readily in intestinal fluids even when slightly acid, a condition often found in the upper intestine. It resists erosion from stomach motion. Its action never depends on an assumed rate of stomach emptying. Disintegration is triggered by hydrolytic action of intestinal esterases.

Prepared in a special plant under careful controls, Eastman *C-A-P* forms coats that resist abrasion in tumbling when properly applied by conventional methods. The coats come out uniform, smooth, and glossy. Quotations and full technical details from ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Gillies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

DPi

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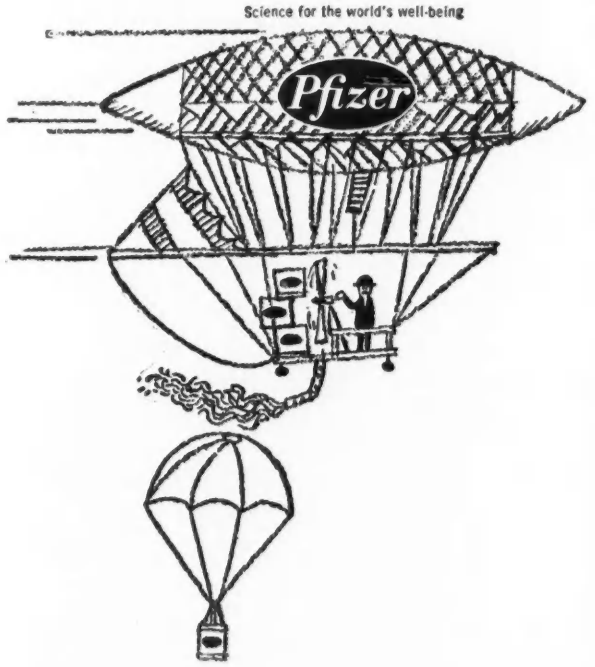
Distillation Products Industries *is a division of* **Eastman Kodak Company**

Chinawood oil (see Tung oil).
Chloral, tech., 94% min., dms., c.l., works lb. .43 • —
dms., l.c.l., works lb. .44 • —
tanks, multiple units, 5 cars, dms., l.c.l., works lb. .21 • —
Chloral hydrate, USP, jars, 1,000-lb. lots lb. 1.00 • —
jars, 500-lb. lots lb. 1.03 • —
jars, 100-lb. lots or less lb. 1.05 • —
Chlordan, agricultural dms., c.l., frt. alld lb. .65 • —
dms., l.c.l. 5,000-10,000-lb. lots, frt alld lb. .66 • —
clarified, dms., c.l., frt. alld lb. .69 • —
dms. l.c.l. 5,000-10,000-lb. lots, frt. alld lb. .70 • —
Chlorinated paraffin, 40%., dms., c.l., frt. alld lb. .15 • —
dms., l.c.l., 10 dms or more, same basis lb. .16 • —
70%, dms., c.l., same basis lb. .18½ • —
dms., l.c.l., 10 dms. or more, same basis lb. .19½ • —
Chlorinated rubber, 5, 10, 20 cps., ctns. c.l works lb. .60 • —
ctns., l.c.l. works lb. .61 • —
125 cps. ctns. c.l. works lb. .70 • —
300 cps., ctns. c.l., works lb. .80 • —
Chlorine, liq., cyls c.l., works, frt. equald lb. .11 • —
cyls., l.c.l., Metropolitan area, same basis lb. .12½ • .13¼
tanks, single units works, frt. equald 100 lbs. 3.25 • —
tanks, multiple units, 5 cars, works, frt. equald, same basis 100 lbs. 4.15 • —
Chlorine, liq., tanks, multiple units, 4 cars, same basis 100 lbs. 4.35 • —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.35 • 5.85
tanks, multiple units, 1 car, same basis 100 lbs. 6.25 • 7.25
Chloroacetic acid, mono, flake, 99%, purif. dms. c.l lb. .23½ • .25½
dms. l.c.l lb. .24½ • —
Tech., flake, 96-97%, dms., c.l., frt. equald lb. .19 • —
dms., l.c.l. frt equald lb. .20 • —
2-Chloro-4-aminotoluene, tech., liq., dms., frt. alld lb. 1.03 • —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 • —
5-Chloro-2-aminotoluene, tech., liq., dms., frt. alld lb. .66 • —
m-Chloroaniline, dms. c.l., frt. alld. lb. .75 • —
dms., l.c.l., same basis lb. .77 • —
tanks, same basis lb. .73 • —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 • —
dms., l.c.l., same basis lb. .54 • —
tanks, same basis lb. .50 • —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 • —
dms., l.c.l., same basis lb. .79 • —
o-Chlorobenzaldehyde, dms., t.l., works lb. 1.05 • —
dms., t.t.l., same basis lb. 1.20 • —
p-Chlorobenzaldehyde, dms., t.c.l., works lb. 1.93 • —
o-Chlorobenzoic acid, fib dms., t.l., works lb. 1.10 • —
fib. dms., smaller lots, works lb. 1.25 • —
p-Chlorobenzoic acid, fib dms., 2,000-lbs. or more, works. lb. 2.25 • —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 • —
Chloroform, tech., dms. c.l., dlvd. E lb. .18 • —
dms., l.c.l., same basis lb. .19 • —
tanks, same basis lb. .17 • —
USP, dms., c.l., dlvd lb. .27 • —
dms., l.c.l., dlvd lb. .30 • —
tanks, minimum 4,000 gals. dlvd. lb. .25 • —
3-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb. .90 • —
Powd., dlvd. E., 100% basis lb. 1.00 • —
4-Chloro-2-nitroaniline, powd. dlvd. E lb. .86 • —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 • —
4-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .99 • —
5-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .25 • —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l. same basis lb. .38 • —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 • —
dms., l.c.l., same basis lb. .38 • —
Chloropicrin, comi., cyls., 180 lbs., frt alld lb. 1.07 • —
cyls., 100 lbs., same basis lb. 1.08 • —
cyls., 50 lbs., same basis lb. 1.14 • —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465 —
dms., l.c.l. frt. equald lb. .0515 —
tanks, frt. equald lb. .0415 —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher
o-Chlorotoluene, tech. dms., t.l., works lb. .37 • —
dms., l.c.l., t.t.l., same basis lb. .38 • —
Choline bitartrate, 100-lb. dms., frt. equald lb. 1.25 • —
Choline chloride, 100-lb dms., frt. equald lb. 1.25 • —
Choline dihydrogen citrate, 100-lb. dms., frt. equald lb. 1.25 • —
Chrome green, CP, dark, light, medium blue content, 1-15%, bbls. dlvd E of Rockies. lb. .43 • —
Chrome green, CP, dark, light medium blue content, 16-30%, bbls., same basis lb. .44 • —
31-45%, bbls., same basis. lb. .44 • —
45-49%, bbls.., same basis. lb. .45 • —
reduced color 25%, bbls., same basis lb. .20 • —
Chrome green prices 1c. higher W of Rockies.
Chrome orange, CP bbls., dlvd. E. of Rockies lb. .35 • —
Chrome orange prices 1c higher W of Rockies.
Chrome yellow, CP bbls., dlvd. E. of Rockies lb. .35 • —
Chrome yellow price 1c. higher W. of Rockies.
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ • —
dms., t.c.l., dlvd. N. Y. Metropolitan area lb. .30 • .31
Chromic acid, NF (see Chromium trioxide).
Chromium acetate, soln., 7½%, dms., 500-2,000-lb lots, works. lb. .10 • —
Chromium fluoride bbls., works lb. .51 • .53
Chromium oxide, hydrated, bbls., fib. dms. c.l., frt. alld. lb. 1.20 • —
Pure, bgs., c.l., frt. alld lb. .44½ • —
bgs., l.c.l., same basis lb. .45¼ • —
Chromium trioxide, NF bots lb. 1.15 • —
Cinchona bark, NF, red, broken, bgs lb. .35 • —
NF, yellow broken, bgs lb. .35 • .40
Cinnamic acid, refd., bots lb. 2.50 • 3.50
Cinnamic alcohol, bots lb. 1.50 • 1.60
Cinnamic aldehyde, dms. lb. .80 • 1.00
Cinnamon, Ceylon, No. 2, bgs lb. .58 • —
Ceylon, No. "0000," bgs lb. .64 • —
Cinnamon bark oil, bots. lb. 6.00 • —
Cinnamon leaf oil, crude, dms lb. 1.60 2.00
Citral, CP, bots lb. 4.65 • 5.55
Extra, bots lb. 5.00 • 7.25
Syn., dms. lb. 6.10 6.65
Citric acid, USP, anhyd., hydrous, gran., 100-lb. bgs., f.o.b. works lb. .27½ • —
100-lb. bgs., 10,000-lb. lots, same basis lb. .28 • —
250-lb. dms., c.l., same basis lb. .27 • —
250-lb. dms., 10,000-lb. lots, same basis lb. .28½ • —
Citric acid powder ½c. per lb. higher.
Citronella oil, Ceylon, dms lb. 1.05 • —
Formosan, dms. lb. 1.15 • —
Citronellal, bots, dms. lb. 1.40 • 1.60
Citronellol, bots, dms. lb. 1.90 2.50
Synthetic, dms. lb. 1.70 —
Civet, artif., bots lb. 13.75 • 15.00
Nat. bots oz. 8.50 • 15.00
Clay, hail, dom., airfloated, bgs., c.l. Tenn ton. 17.50 • 21.50
crushed, shed moisture, bulk, c.l., Tenn ton. 8.00 • 11.25
imp., airfloated bgs., c.l. Atl port net-ton. 43.00 • 47.00
lump, bulk, Atl port net-ton. 31.50 • 37.50
Clay, China, dom., dry-grd., air-floated, 99%, 325 mesh, Georgia bgs., c.l., works ton. 11.00 • 17.00
Georgia bgs. t.c.l. works ton. 13.50 • 22.50
Clay, imp., white, lump, bulk, c.l., ex-dock Philadelphia, Portland, Me long-ton. 23.00 • 35.00
white powd. bgs. c.l. ex dock. net-ton. 50.00 —
bgs. t.c.l. ex whse net-ton. 60.00 • 70.00
Cleaner's naphtha, petroleum, 105°F Flash, tankcars New Jersey and New York gal. 18 • —
Group 3 gal. .12375 —
Houston, Texas gal. .145 • —
140°F Flash, tankcars, New Jersey or New York gal. .205 • —
Group 3 gal. .154 • —
Houston Texas gal. .17 • —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 • —
1.6 tech., solid dms. frt. alld lb. .77 • —
1.7 tech., dms. frt alld. lb. 2.42 • —
Clove bud oil, USP, dms. lb. 2.53 • —
Cloves, Madagascar, bgs. lb. .36 • —
Zanzibar, bgs. lb. .39 • —
Clove leaf oil, crude, dms. lb. 1.10 • —
CMC, crude, 96.4% low or medium vis bgs., 23,000 lbs., dvld. E., 100% basis lb. .40 • —
96.4% low, or medium vis., bgs., less than 23,000 lbs., dlvd. E., 100% basis lb. .42 • .46
65%, low or medium vis., bgs., c.l., dlvd E., 100% basis lb. .40 • —
t.c.l., dlvd. E., 100% basis lb. .42 • 1.00
CMC, purif, high vis. (see Cellulose gum).
CMC prices W. of the Rockies are ½c. per lb. higher and are on a dlvd. basis.
Coaltar, crude, resale for soln., tanks, works gal. .17 • —
Refd., resale, indust., dms., c.l., ex whse gal. .35 • —
dms., t.c.l., ex whse gal. .39 • —
tanks, works gal. .20½ • —
Coaltar pitch, aluminum, bulk, works ton. 42.00 • —
Carbon, bulk works ton 42.00 • —
Indust., bulk, works ton 44.00 —
Core bulk works ton 40.50 —
Fiber bulk works ton 48.00 —
Roofing, 140-155°F, Federal Specification RP-381 Type I tanks, works ton 41.00 —
Cobalt acetate 23.4% Co., dms., dlvd lb 1.04 —
Cobalt blue, genuine, 250 lb bbls. dlvd E of Rockies lb. 4.90 —
Cobalt blue prices 1c higher W. of Rockies
Cobalt blue (imitation (see Ultramarine blue)
Cobalt carbonate 48% Co., powd., bgs., dlvd lb. 1.45 —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .93 • —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 1.97 • —
Cobalt linoleate, fused 8½% Co., dms lb. .71½ —
Liq., 6% Co., dms lb. .44 • —
Cobalt metal, 99% dms., f.o.b. carrier lb 1.50 —
Cobalt naphthenate, liq. 6% Co., dms. dlvd lb. .48¾ —
Cobalt nitrate, 20.1% Co. bbls. dlvd. lb. .75 • —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., bgs., dlvd E of Mississippi R. lb. 1.18 • —

Science for the world's well-being



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TARTARIC ACID—shipped by Pfizer in powdered and fine granular forms.

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ERYTHORBIC ACID—(formerly isoascorbic acid) supplied in granular and powdered forms.

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Cobalt Oxide—2,2-Dihydroxy-5-5-Dichloro-Diphenyl-Methane

Cobalt oxide, black, ceramic grade, 70-71% Co kgs. same basis lb 1.12 —
Cobalt oxide prices W of Mississippi R 3c. per pound higher
Cobalt phosphate powd., 32.1% Co., dms., dlvd lb. 1.35 —
Cobalt resinate fused 3% Co. dms lb. 38½ — —
Cobalt sulfate, cryst., 21% Co. dms., dlvd lb 64 —
Monohydrated, 33% Co., dms., dlvd lb 1.09 — —
Cobalt tallate 6% Co. dms. dlvd lb 44 — —
Cocaine, USP cns., 100-oz lots, f.o.b works oz.17.50 — —
Cocaine hydrochloride, cns 100-oz lots f.o.b works oz.13.75 — —
Cocillana bark, bls. lb. .20 .22
Cocoa butter, bgs. lb. .66 — .71
Coconut oil, crude, tanks, New York lb. .12 — —
tanks, Pac. coast lb. .10¾ — —
refined, deod., dms lb. .18 — .19
Coconut acid oil, dist dms lb 21½ — .24
tanks lb. 19 — —
double dist. (stripped), dms. lb 22½ — .25
tanks lb. .20 — —
Cod oil, dms., spot lb. 08½ — .08⅝
Codeine, NF cns., 100-oz lots oz.13.25 — —
Codeine hydrochloride cns., 100-oz. lots oz.11.75 — —
Codeine phosphate, USP, cns., 100-oz lots oz.10.25 — —
Codeine sulfate USP cns. 100-oz. lots oz.10.75 — —
Codliver oil USP dms gal 1.40 1.70
Cohosh root, black bls lb 20 25
Blue bls lb 20 25
Colchicine, USP, bots. 27.50 29.00
Colchicum root bls lb .35 .45
Colchicum seed, bgs. lb. Nom.
Collodion, USP, dms. lb. .32½ —
USP flexible dms lb .34 — —
Colocynth pulp bls lb .75 — —
Colombo root, bls lb .16 .18
Condurango bark bls lb .18 .20
Copaiba balsam, cns., dms lb. .85 — .95
Copaiba oil cns lb 1.35 2.00
Copper acetate bbls., c.l., works lb. .53 — —
bbls., l.c.l., works lb. .54 — —
Copper carbonate, 55%, dark dense, c.l., works lb. .3545 — —
bgs., l.c.l., works lb. .3695 — —
Copper chloride, cupric, anhyd., dms., works lb. .44½ — .45
cryst., dihydrate, dms., works lb. .30¾ — .31¼
cryst., dried, dms., works lb. .38¾ — .39¼
cuprous, dms., works lb. .3995 — .4295
Copper cyanide, tech. dms. 20,000-lb lots or more lb. .609 — —
dms. 1,000-lb lots or more lb. 619 — —
dms smaller lots lb 639 .65
Copper gluconate dms lb 3.20 — —
Copper hydrate dry dms. c.l., frt. E of Miss lb. .52½ — —
dms., l.c.l., same basis lb. .53 — —
Copper metal electrolytic dlvd. Valley, basis lb. .31 — —
Copper naphthenate liq. 8% Cu. dms frt alld lb .26½ — —
Copper nitrate tech. cryst. dms., works lb .30¾ .32¾
Copper oleate solid 9% Cu dms., works lb 45 — —
Copper oxide black bbls. 100-5,000-lb. lots, works lb. .47 — —
red., 97%, USN Type I, bbls., 100-5,000 lbs. lots lb. .47½ — —
90% USN Type II, bbls. 100-5,000-lb lots or more, works lb .45½ — —
Copper quinolinolate, 18% Cu, dms., ton lots lb 4.25 — —
10% active quinolinolate dms lb 1.14 1.15
Copper resinate, precip. dms., frt alld lb. .47 — —
Copper sulfate, CP, gran., dms., works lb 1885 — —
Cryst., 99%, bgs., c.l., works 100 lbs.12.50 — —
bgs., l.c.l., works 100 lbs.13.00 -15.50
Monohydrated, 35%, dms., c.l., works 100 lbs.23.35 — —
dms, l.c.l., works 100 lbs.24.10 — —
Copper sulfate, tribasic, distributors, 50-lb. bgs., c.l., works 100 lbs.28.60 — —
bgs., l.c.l., works 100 lbs.30.10 — —
Copper undecylenate dms lb 2.45 — —
Copra, Atl., Gulf ports ton.153.50 — —
Pac. coast, c.i.f. ton.148.50 — —
Coriander oil, USP, bots. lb. 5.75 6.25
Coriander seed, Moroccan, bgs. lb. .19 — —
Rumanian, bgs. lb. .17 — —
Yugoslavian bgs lb 08½ — —
Corn oil, crude, tanks, works lb. .20 — —
Foots, (soapstock, 95% acid), tanks, New York lb. .05¾ — —
Refd., salad, dms lb. .2591 — .2615
tanks lb. .2391 — —
Corn oil, acid, dms lb. .16 — .18½
tanks lb. .13½ — —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs min 100 lbs 7.30 — —
paper bgs. l.c.l 100 lbs 7.45 — —
Corn syrup, 43° Be., tanks, dlvd, N Y 100 lbs. 6.15 — —
non-ret dms. c.l., same basis. 100 lbs. 7.23 — —
Corrosive sublimate (see Mercuric chloride)
Cortisone acetate USP bots. kilo or more gram .85 .90
Costus oil bots oz 6.00 —
Cottonseed meal 41% bgs. Memphis ton.67.00 -68.00
Cottonseed oil, crude, tanks South, Est lb. .12⅝ — .12¾
tanks, Valley lb. .12½ — —
tanks, Tex., Waco lb. .12½ — —
Foots (soapstock, acid 95%), New York, tanks lb. .04¼ — —
Refd., salad, dms. lb. .18 — .18¼
tanks lb. .16 — —
Cottonseed oil acids, dist., dms lb. .16 — .18½
tanks lb 13½ — —
Coumarin, NF, cryst., dms. lb 3.20 3.30
Cramp bark, NF bls lb 90 1.00
Cream of tartar (see Potassium bitartrate)
Creosote carbonate, NF bots. chys. lb 3.05 3.26
Creosote, coaltar, crude, tanks, works, frt adjusted gal .24 —
Crude, soln 80% tanks, works, gal. 226 — —
Refd. dms., c.l., works gal. 50 — —
dms., l.c.l., same basis gal. .62 — —
tanks, same basis gal. .38 — —
West Coast creosote prices computed on a basis of 24c per gallon for straight oil and 20c per gallon for coaltar
Creosote, beechwood, chys., dms., f.o.b. works, dlvd in Metropolitan area lb 1.72 1.77
Hardwood, NF chys. dms. same basis lb 1.42 1.47
Pinewood dms. incl. c.l. works. lb. 0611 — —
dms incl., l.c.l., works lb. 0684 — —
dms incl., l.c.l. ex whse, New York lb. .0795 — —
tanks, works lb. .0511 — —
Creosote oil (see Creosote coaltar).
Cresol, tech. 50% below 204°C., dry above 207°C., wide distillation range non-ret. dms. c.l. frt alld lb. .16½ — —
non-ret dms. l.c.l., same basis lb. .17½ — —
tanks, same basis lb. .145 — —
USP, 50% 204°C., dry above 207°C., wide distillation range, non-ret. dms. c.l., same lb. .18 — —
Cresol, USP, 50%, 204°C., dry above 207°C, wide distillation range non-ret dms. l.c.l. same basis, lb. .19 — —
tanks, same basis lb. .16 — —
m-Cresol, 95-98% dms. c.l., works, lb. .60 — —
dms., l.c.l., works lb. .61 — —
m-p-Cresol, 5-95% 3°C. dms., c.l., frt equald lb. .18 — —
dms., l.c.l., same basis lb. .19 — —
tanks, same basis lb 16 — —
2,97% 2°C. dms. c.l. frt. equald. lb. .22 — —
dms., l.c.l. same basis lb 23 — —
tanks, same basis lb 20 — —
o-Cresol 30.5°C. m.p and over, ret., dms c.l. frt equald lb. .17 — —
ret. dms., l.c.l., same basis lb. .18 — —
tanks, same basis lb. .15 — —
30°-30.49°C m.p. dms. c.l., frt. equald lb. .16½ — —
ret. dms., l.c.l., same basis lb. .17½ — —
tanks, same basis lb. .14½ — —
29°-29.9°C, m.p., dms. c.l., frt. equald lb. .16 — —
ret. dms., l.c.l., same basis lb. .17 — —
tanks, same basis lb. .14 — —
25°-28°C m.p. dms c.l., frt. equald lb. .15 — —
ret. dms., l.c.l. same basis lb. .16 — —
tanks, same basis lb. .13 — —
p-Cresol, 98% dms., c.l., f.o.b., frt. alld. lb. .50 — —
dms., l.c.l., same basis lb. .52 — —
tanks, same basis lb. .45 — —
p-Cresyl methyl ether cns lb. 1.80 2.05
Cresylic acid, coaltar, dom., meta-para content above 25%, resins and triceresyl phosphate grades dms., c.l., t.l. frt equald gal. 1.35 — —
dms., l.c.l., same basis gal. 1.40 — —
tanks, same basis gal 1.15 — —
metapara content 25% or less, dms., c.l., t.l., same basis gal 1.20 — —
dms., l.c.l., same basis gal 1.25 — —
tanks, frt. equald gal. 1.00 — —
Imp., metapara content 25% or less, f.o.b works, frt. equald to competitive points, c.l. gal. 1.15 — —
l.c.l., f.o.b., works gal. 1.20 — —
tanks, same basis gal. 1.00 — —
Crotonaldehyde, 91-93% dms., l.c.l. works lb. .25 — —
Crotonic acid, 200-lb. dms., c.l., dlvd lb. .49 — —
dms., l.c.l., dlvd lb. 51 — —
Cryolite, nat. indust., bgs., c.l., works 100 lbs.13.00 — —
bgs. l.c.l. works 100 lbs.14.25 — —
Cubeb oil, cns lb. 8.50 8.75
Cube root, powd., 5% rotenone, bgs., t.l., works lb. 21 — —
bgs., l.t.l., works lb 22 — —
Cubeb berries, NF, bgs. lb 1.30 — —
Powd., cs. lb 1.45 — —
Cumene dms. c.l., works lb. .12 — —
dms., l.c.l., works lb. .14 — —
tanks, works lb .11 — —
Cumin seed, Iranian, bgs. lb. .17 — —
Turkish, bgs. lb. .16½ — —
Cumin seed oil bots. cns lb.15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N, gran. bgs., Niagara Falls, Ont. contract. ton 57.00 — —
pulv., 21% N bgs., works, unit-ton. 2.85 — —
Cyanamide, indust. grade, bgs. c.l. works ton 75.00 — —
bgs., l.c.l., works ton 96.00 — —
Indust grade 8-16 mesh, dms. c.l., works ton.120.00 — —
dms. l.c.l. works ton 140.00 — —
Cyclohexane, 99%, tech. dms. c.l., dlvd. E of Rockies gal 1.02 — —
dms. l.c.l. same basis gal. 1.10 — —
dms., c.l. dlvd W of Rockies gal 77 — —
dms., l.c.l., same basis gal. .85 — —
tanks, works gal. .55 — —
Cyclohexane, 93%, tech., 40-dm. lots or more, f.o.b. works gal. .56 — —
5-39 dms. same basis gal. .60 — —
tanks, same basis gal. .36 — —
Cyclohexanol, tech., dms. c.l., works, frt. alld. E lb. .30½ — —
dms., l.c.l., works, same basis, lb. .31½ — —
tanks, works, same basis lb. .28 — —
Cyclohexanone, tech. dms., c.l., works lb. .33½ — —
dms., l.c.l., works lb. .34½ — —
tanks, works lb. 31 — —
Cyclohexylamine, tech. dms., c.l., works lb. .49 — —
dms l.c.l., works lb. .50 — —
tanks, works lb. .47 — —
Cypress oil, bots. lb 5.30 — —

D

2,4-D tech. bgs. dms. c.l., works, frt equald lb. .40 — —
bgs. dms. l.c.l. same basis lb. .45 — .49
2,4-D butyl ester dms. c.l. works, lb. .43 — —
dms., l.c.l., same basis lb. .48 — .52
tanks, same basis lb. .42 — —
2,4-D isopropyl ester, dms., c.l., works lb. .43 — —
dms. l.c.l., works lb. .48 — .52
tanks, works lb. .42 — —
Dandelion root, bls lb. .35 — .40
DDD, tech., flake grd., fib dms., c.l., works lb. .45 — .47
fib dms. l.c.l. works lb. .46 — .48
DDT, flake or pump, bgs., c.l., dlvd lb. .17 — —
bgs., smaller lots, same basis, lb. .19 — —
fib, dms., c.l., same basis lb. .18 — —
fib dms., smaller lots, same basis lb. .21 — —
Powdered DDT 1c per pound higher.
DDVP (see Dimethyl dichlorovinyl phosphate)
i-Decanol, tech. dms., c.l., dlvd E, lb. .41½ — —
dms., l.c.l., dlvd. E lb. .43½ — .44½
tanks, dlvd. E lb. .37½ — —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb. .20½ — —
dms., l.c.l., dlvd lb. .22 — —
tanks, dlvd. lb. 18 — —
Perfume grade, bots. lb 1.00 2.00
Decyl alcohol normal (see i-Decanol)
Deertongue leaves, bls. lb. .50 .60
Defluorinated phosphate, feed grade, 14% P paper bgs., c.l., t.l., Tupelo, Miss. ton.52.00 — —
18% P, paper bgs, c.l., t.l., Muscatine, Iowa. ton.71.25 — —
paper bgs, c.l., Plant City, Fla. ton.61.25 — —
paper bgs, c.l., t.l., Port Arthur, Tex. ton.65.75 — —
paper bgs., c.l., works, Wales Tenn ton.66.00 — —
19% P, paper bgs., c.l., t.l., works, Houston, Tex ton.69.35 — —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices
Degras, common (15-17% free fatty acid), 400-lb dms lb. .12 — .14
Neutral (over 2% free fatty acid), 400-lb dms lb. 13 — —
Denatured alcohol, ethyl CD-18, CD-19, dms., c.l., dlvd. E. of Rockies gal. .69½ — —
dms., l.c.l., same basis gal. .74½ — .80½
tanks, dlvd. same basis gal. .53½ — —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms. c.l., dlvd E of Rockies gal. .72 — —
dms. l.c.l. same basis gal. 77 — .83
tanks, same basis gal 56 — —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1 dms., dlvd E of Rockies gal. .70½ — —
dms. l.c.l. same basis gal. .75½ — .81½
tanks, same basis gal. .54½ — —
SD2B dms c.l dlvd E of Rockies gal. .69 — —
dms. l.c.l. same basis gal. .74 — .80
tanks, same basis gal. .53 — —
SD3A dms c.l dlvd E of Rockies gal. .68 — —
dms. l.c.l same basis gal. .73 — .79
tanks, same basis gal. .52 — —
SD23A, dms., c.l., dlvd. E. of Rockies gal. .70½ — —
dms., l.c.l. same basis gal. .75½ — .81½
tanks, same basis gal. .54½ — —
Denatured alcohohl, ethyl SD23H, dms., c.l. dlvd. E. of Rockies gal. .71 — —
dms., l.c.l. same basis gal. .76 — .82
tanks, same basis gal. .55 — —
SD29, dms., c.l. dlvd. E. of Rockies gal. .69½ — —
dms., l.c.l., same basis gal. .74½ — .80½
tanks, same basis gal. .53½ — —
SD30, dms., c.l. dlvd. E. of Rockies gal. .68 — —
dms., l.c.l., same basis gal. .73 — .79
tanks, same basis gal. .52 — —
SD35A, dms., c.l., dlvd. E. of Rockies gal. .71 — —
dms., l.c.l., same basis gal. .76 — .82
tanks, same basis gal. .55 — —
SD-40, dms., dlvd. E. of Rockies, gal. .70½ — —
dms., l.c.l., same basis gal. .75½ — .81½
tanks, same basis gal. .54½ — —
For anhyd. alcohol on above formulas prices are 7c per gal higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained.
d-Desoxyephedrine hydrochloride, dms lb..15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.60 — —
Dextrin, corn, gum, paper bgs., c.l., works 100 lbs. 9.19 — —
paper bgs., l.c.l. 100 lbs. 9.34 — —
canary dark, paper bgs., c.l. 100 lbs. 9.03 — —
paper bgs., l.c.l. 100 lbs. 9.18 — —
indust. grade, 6-16 mesh, canary light, paper bgs., c.l. 100 lbs. 8.93 — —
paper bgs., l.c.l. 100 lbs. 9.08 — —
white, paper bgs., c.l. 100 bgs. 8.77 — —
paper bgs., l.c.l. 100 lbs. 8.92 — —
Corn dextrin in cotton bgs. 15c per 100 lbs higher
Dextrose anhyd., coml., bgs., c.l. 100 lbs. 8.65 — —
bgs. l.c.l. 100 lbs. 8.80 — —
Anhyd., special, aluminum foil lined fib. dms., 200-lb dms 100 lbs.14.70 — —
100-lb. dms. 100 lbs.15.20 — —
Hydrated, comml., bgs., c.l. ex whse 100 lbs. 7.45 — —
bgs. c.l., ex whse 100 lbs. 7.60 — —
USP dms lb. .19¾ — —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb. .15½ — —
dms., l.c.l., dlvd. lb. .17 — —
tanks, dlvd lb. .13 — —
Tech., dms., c.l., dlvd. lb. .15 — —
dms. l.c.l., dlvd. lb. .16½ — —
tanks, dlvd lb. .12½ — —
Diacetyl, flavor grade, bots lb. 3.30 4.30
Di-sec-amyl phenol, dms., c.l., works lb. .32 — —
dms., l.c.l., works lb. .33 — —
tanks works lb. .29½ — —
Di-tert-amyl phenol, dms., c.l., works lb. .32 — —
dms., l.c.l., works lb. .33 — —
tanks, works lb. .29½ — —
Diallylamine, dms., c.l., dlvd. lb. .98½ — —
dms. l.c.l., dlvd. lb. 1.00 — —
tanks, dlvd lb. .96 — —
o-Dianisidine dry, tech., fib dms. lb. 2.00 — —
Dibenzyl sebacate, dms., c.l., frt. alld. E. of Rockies lb. .93 — —
dms., l.c.l., same basis lb. .93½ — .94
tanks, same basis lb. .91 — —
Dibromobenzene, bgs., 500-lb lots. lb. .55 — —
2,6-Di-tert-butyl-p-cresol, teed grade, c.l., t.l., dms., dlvd. lb. .65 — —
t.t.l., dms., same basis lb. .68 — —
Food grade, c.l., t.l. dms., dlvd. lb. .65 — —
dms., t.t.l., same basis lb. .68 — 1.10
Tech., dms., c.l., t.l., dlvd. lb. .57 — —
dms., l.c.l., same basis lb. .60 — —
tanks, same basis lb. .54 — —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb. .31½ — —
dms., l.c.l., t.t.l., dlvd. E lb. .33 — —
tanks, dlvd E lb. .29 — —
Dibutyl maleate, dms., c.l., t.l., dlvd. E lb. .31½ — —
dms., l.c.l., t.t.l., dlvd. E lb. .33 — —
tanks, dlvd. E lb. .29 — —
Dibutyl phthalate, dms., c.l., frt. alld. E. of Rockies lb. .29½ — —
dms., l.c.l., same basis lb. .30¾ — —
tanktrucks, 1,000-1,999 gals., same basis lb. .27½ — —
tankcars, tanktrucks, 2,000 gals., same basis lb. .26¾ — —
Dibutyl sebacate, CP, dms., c.l., frt. alld. E. of Rockies lb. .67½ — —
dms., l.c.l., same basis lb. .68 — .68½
tanks, same basis lb. .65½ — —
Dibutyl tartrate, dms., works, frt. alld lb. .65½ — —
Dibutylamine, dms., c.l., dlvd lb. .55½ — —
dms., l.c.l., same basis lb. .57 — —
tanks, same basis lb. .53 — —
Dicapryl phthalate, dms., c.l., frt. alld. E. of Rockies lb. .25 — —
dms., l.c.l., same basis lb. .26½ — —
tanks, same basis lb. .22½ — —
Dicaprylsebacate, dms., c.l., works, lb. .62 — —
dms., l.c.l., works lb. .63¼ — .64
tanks, works lb. .61 — —
2,5-Dichloroaniline, dms., works lb. .83 — —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld. lb. .73 — —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb. .12¾ — —
dms., l.c.l., same basis lb. .13¾ — —
tanks, same basis lb. .11 — —
p-Dichlorobenzene, dms., c.l., f.o.b., works, frt. alld. E lb. .12 — —
dms. 2,000 lbs. or more same basis lb. .14½ — —
1,4-Dichlorobutane, dms., c.l., or t.l., works lb. .33½ — —
dms., l.c.l., or t.t.l., works lb. .34 — —
tanks, works lb. .32 — —
Dichlorodiphenyltrichloroethane (see DDT).
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E lb. .15½ — —
dms., l.c.l., t.t.l., same basis lb. .17 — —
tanks, same basis lb. .13 — —
Dichloroisocyanuric acid, dms., c.l., t.l., frt. equald lb. .65 — —
dms., l.c.l., same basis lb. 75 — —
Dichloropentanes dist., dms., c.l., works lb. .05 — —
dms., l.c.l., works lb. .06 — —
tanks works lb. 03 — —
Dichlorophenoxyacetic acid (see 2,4-D).
Dicyclohexylamine dms. c.l., works. lb. .54 — —
dms. l.c.l. works lb. .55 — —
tanks works lb. .52 — —
Dicyclohexyl phthalate, gran., fib. dms c.l. works frt alld. lb. .47½ — —
fib. dms., l.c.l., same basis lb. .49 — —
Dicyclopentadiene dms. c.l., t.o.b. works lb. .14½ — —
dms., l.c.l., same basis lb. .14¾ — —
tanks same basis lb. .12 — —
Didecyl phthalate dms., c.l., works. lb. .25½ — —
dms., l.c.l, same basis lb. .27 — —
tankcars, tanktrucks, 2,000 gals. lb. .23 — —
tanktrucks 1,000-1,999 gals, same basis lb. .23½ — —
Dieldrin, dms., c.l. dlvd. lb. 1.85 — —
dms. l.c.l dlvd lb. 1.90 — —
Diethanolamine dms. c.l., dlvd E. lb. .27 — —
dms., l.c.l. same basis lb. .28½ — —
tanks same basis lb. .24½ — —
Diethanolamine lauryl sulfate, dms., c.l., frt alld lb. .27½ — —
dms., l.t.l. frt alld. lb. .28½ — —
tanks frt alld lb. .26½ — —
Diethyl barbituric acid (see Barbital).
Diethyl carbonate dms. c.l., t.o.b. works lb. .47½ — —
dms., l.c.l., same basis lb. .48½ — —
tanks, same basis lb. .45 — —
Diethyl ethanolamines, dms., c.l., dlvd lb. .69½ — —
dms., l.c.l. dlvd. lb. .71 — —
tanks, dlvd lb. .67 — —
Diethyl oxalate dms. c.l., t.o.b. works lb. .42½ — —
dms., l.c.l. same basis lb. .43½ — —
tanks, same basis lb. .40 — —
Diethyl phthalate dms., c.l., dlvd. lb. .27¼ — —
dms., l.c.l., dlvd lb. .28¾ — —
tanktrucks, 1,000-1,999 gals, same basis lb. .24¾ — —
tankcars, tanktrucks, 2,000-lb lots, same basis lb. .24¼ — —
Diethyl sulfate, dms, c.l., frt. alld. E. lb. .21 — —
dms., l.c.l., frt. alld. E lb. .22½ — —
tanks, frt alld. E lb. .18½ — —
Diethyl thiourea dms., c.l., t.l., works lb. .58 — —
dms., l.c.l. same basis lb. .59 — —
Diethyl toluamide, 90-95% meta isomer dms. c.l. t.l., works. lb 2.30 — —
5-44 dm. lots, works lb 2.35 — —
1-4 dm lots, works lb 2.40 — —
N,N-Diethyl-m-toluidine tech., liq., tanks, frt alld lb. .83 — —
Diethylamine, dms c.l., dlvd E lb. .52 — —
dms. l.c.l., same basis lb. .53½ — —
tanks, same basis lb. .49½ — —
N,N-Diethylaniline dms., c.l., frt. alld lb. .57 — —
dms., l.c.l. same basis lb. .58 — —
tanks, same basis lb. .55 — —
Diethylbenzene, 380 lb. dms., c.l., t.l., frt alld., Zone 1 lb. .17½ — —
f.o.b. Zone 2 lb. .18½ — —
380-lb. dms., l.c.l., c.l., f.o.b. Zone 1 lb. .18½ — —
f.o.b. warehouse points, Zone 2 lb. .20½ — —
tankcars, Zone 1 lb. .15 — —
Zone 2 lb .16 — —
Zone 1 is East of the Rockies. Zone 2, West of the Rockies
Di-2-ethylhexyl adipate (see Di-octyl adipate).
Di-2-ethylhexyl phthalate (see Di-octyl phthalate).
Diethylene glycol dms. c.l., dlvd E. lb. .17¾ — —
dms. l.c.l. same basis lb. .19¼ — —
tanks same basis lb. .15¼ — —
Diethylene glycol diethyl ether, dms., c.l., works lb. .55 — —
dms., l.c.l., works lb. .55¾ — —
Diethylene glycol monobutyl ether, c.l., dms., frt. alld. E lb. .30¾ — —
dms., l.c.l., frt. alld. E lb. .32¼ — —
tanks, frt. alld E lb. .28¼ — —
Diethylene glycol monobutyl ether acetate, dms., c.l., works lb. .30¾ — —
dms., l.c.l., works lb. .31½ — —
tanks, works lb. .28¼ — —
Diethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .22½ — —
dms., l.c.l., dlvd. E lb. .24 — —
tanks dlvd E lb. .20 — —
Diethylene glycol monoethyl ether acetate, dms., c.l., works. lb. .27¼ — —
dms. l.c.l., works lb. .28 — —
tanks, works lb. .25¼ — —
Diethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 — —
dms., l.c.l., dlvd. E lb. .22½ — —
tanks, dlvd E lb. .18½ — —
Diethylenetriamine, dms., c.l., dlvd, E lb. .44 — —
dms., l.c.l., dlvd. E lb. .45½ — —
tanks, dlvd E lb. .41½ — —
Diethylstilbesterol, USP, bots., 10-kilo lots kilo.100.00 -147.50
bots. 1-kilo lot kilo.110.00 -152.50
Digitalis leaves USP dom. dms lb 1.25 — —
Digitoxin, USP, bots gram. 3.75 4.20
Diglycol laurate dms., ton lots lb. .32½ — —
Diglycol stearate, dms., t.l lb. .26 — —
Diglycolic acid, bgs. c.l., t.l., works. lb. .15½ — —
bgs. l.c.l. works lb. .16 — —
Dihexyl sebacate dms., c.l., works. lb. .66 — —
dms., l.c.l., works lb. .67 — —
tanks, works lb. .64 — —
Dihydrazine sulfate dms., works lb. 1.10 — 1.25
Dihydrostreptomycin sulfate, bulk, gram. .028 — .03
1,2-Dihydroxy anthraquinone, dms., works lb. 3.45 — —
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms lb. 2.55 — —
Tech., dms., 20,000 lbs or more lb. 1.11 — —
dms. 1,050 lbs to 20,000 lbs. lb 1.13 — —
dms., 150 lbs. to 1,050 lbs. lb. 1.15 — —

Di-isobutyl ketone, dms., c.l., dlvd.	lb.	.17	—
dms., t.c.l., dlvd.	lb.	.18½	—
tanks, dlvd.	lb.	.14½	—
Di-isobutyl phthalate, dms., c.l., dlvd. E.	lb.	.28	—
dms., l.c.l., same basis	lb.	.29½	—
tanks, same basis	lb.	.25½	—
Di-isobutylene dms. c.l., dlvd. E	lb.	.10	—
dms., l.c.l., dlvd. E	lb.	.11½	—
tanks, dlvd E	lb.	.08	—
Di-isodecyl phthalate, dms., c.l., frt. alld. E. of Rockies	lb.	.25½	—
dms., l.c.l., same basis	lb.	.27	—
tanktrucks, 1,000 - 1,999 gals., same basis	lb.	.23½	—
tanktrucks, 2,000 gals., same basis	lb.	.23	—
Di-iso-octyl phthalate, dms., c.l., frt. alld. E. of Rockies	lb.	.25	—
dms., l.c.l., same basis	lb.	.26½	—
tanktrucks, 1,000-1,999 gals. same basis	lb.	.23	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.22½	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼	—
dms., t.c.l., same basis	lb.	.24¾	—
tanks, same basis	lb.	.20¾	—
Di-isopropylamine dms., c.l., dlvd. E of Rockies	lb.	.50½	—
dms., t.c.l., same basis	lb.	.52	—
tanks, same basis	lb.	.48	—
Dillweed oil, dom., bots., dms.	lb.	4.00	—
Dimethyl anthranilate, cns.	lb.	4.15	—
Dimethyl dichlorovinyl phosphate, 55-gal dms., dlvd	lb.	3.50	—
Dimethyl ethanolamine, anhyd., dms., c.l., dlvd. E	lb.	.78	—
dms., l.c.l., dlvd. E	lb.	.79½	—
tanks, dlvd E	lb.	.75½	—
Dimethyl ethanolamine, 70%, dms., c.l., dlvd., 100% basis, contained amines	lb.	.78	—
dms., t.c.l., dlvd 100% basis	lb.	.79½	—
tanks, dlvd., 100% basis	lb.	.75½	—
Dimethyl hydroquinone, dms.	lb.	1.90	2.20
Dimethyl phthalate, dms., c.l., works	lb.	.26¾	—
dms., l.c.l., works	lb.	.27¼	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.24¾	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.24¼	—
Dimethyl sebacate, dms., c.l., frt. ald. E. of Rockies	lb.	1.30	—
dms., l.c.l., same basis	lb.	1.30½	1.31
tanks, same basis	lb.	1.23	—
Dimethyl sulfate ret. dms., c.l., works	lb.	.17½	—
ret. dms., t.c.l., works	lb.	.18½	—
tanks, works	lb.	.16½	—
Dimethyl sulfide, dms., c.l., works.	lb.	.17½	—
dms., l.c.l., works	lb.	.18½	.19½
tanks, works	lb.	.15	—
Dimethyl sulfoxide, dms., c.l., f.o.b. works	lb.	.35	—
dms., t.c.l., same basis	lb.	.37	.38
tanks, same basis	lb.	.33	—
Dimethylamine 25% soln., dms., c.l., frt. equald, 100% basis	lb.	.38	—
dms., t.c.l. frt equald, 100% basis	lb.	.38½	—
tanks, frt. equald, 100% basis	lb.	.23	—
40% soln., dms., c.l., frt. equald., 100% basis	lb.	.35	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½	—
tanks, frt. equald., 100% basis	lb.	.28	—
N,N-Dimethylaniline, dms., c.l., frt. alld	lb.	.28	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.26	—
N,N-Dimethylformamide, dms., c.l., t.l., works	lb.	.32½	—
dms., t.c.l., works	lb.	.33	.34
tanks, works	lb.	.30	—
2,4-Dinitroaniline, dms., frt. alld	lb.	.75	—
Dinitroaniline orange toner, CP, bbls. dlvd E. of Rockies.	lb.	1.61	—
Dinitroaniline orange toner prices 1c. higher W of Rockies.			
m-Dinitrobenzene 89°C., dms.	lb.	.26	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt. alld. E	lb.	.17¼	—
dms., t.c.l. frt alld E	lb.	.17¾	—
tanks frt alld E	lb.	.17	—
2,4-Dinitrophenol bbls.	lb.	.41	—
2,4-Dinitrotoluene oil, dms.	lb.	.11	—
Refd., 63°C. dms	lb.	.23	—
Dioctyl adipate, dms., c.l., frt. alld. E. of Rockies	lb.	.37½	—
dms., l.c.l., same basis	lb.	.39	—
tanks, same basis	lb.	.35	—
Dioctyl phthalate dms. c.l., frt. alld. E. of Rockies	lb.	.25	—
dms., l.c.l., same basis	lb.	.26½	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.23	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.22½	—
Dioctyl sebacate dms., c.l., frt. alld. E. of Rockies	lb.	.59	—
dms., l.c.l. same basis	lb.	.59½	.60
tanks, same basis	lb.	.57	—
1,4-Dioxane, dms., c.l., frt. alld. E.	lb.	.31½	—
dms., t.c.l., frt. alld. E	lb.	.33	—
tanks, frt. alld. E	lb.	.29	—
Prices in the west are 2c. per lb. higher.			
Dipentaerythritol bgs. c.l., t.l., dlvd. E	lb.	.34	—
bgs., t.c.l., t.t.l., dlvd. E	lb.	.35	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.58	—
dms., t.c.l., works	lb.	.62	—
dms., l.c.l. ex whse.	gal.	.78	—
tankscars, works	gal.	.41	—
Dipentene, steam dist., dms., c.l., works South	gal.	.72	—
dms., t.c.l., dlvd New York	gal.	.91	—
tanks, works, South	lb.	.55	—
Dip oil (see Tar acid oil).			
Diphenolic acid 1,000-lb or more, bgs works	lb.	.75	—
Diphenolic polyether acids, 1,000-lb. or more, bgs. works	lb.	1.00	—
Diphenyl, bgs. c.l. t.l., works	lb.	.16¾	—
bgs., t.c.l., works	lb.	.18½	—
tanks, works	lb.	.15¾	—
Diphenyl oxide perfume grade, cns.	lb.	.55	.70
Diphenyl phthalate dms., c.l., works.	lb.	.51	—
dms., l.c.l., works	lb.	.53	—
Diphenylamine refd., flake, bgs., c.l., works frt. equald	lb.	.32	—
bgs., t.c.l., same basis	lb.	.34	—
Refd., fused tanks same basis	lb.	.29	—
Refd., diphenylamine in dms., ½c. per lb higher			
Diphenylguanadine bgs., dms., ton tots, frt. alld.	lb.	.51	—
bgs., smaller tots, frt alld	lb.	.52	—
Diphenylhydantoin-sodium. USP, dms	lb.	5.00	5.60
Dipropylene glycol dms., c.l., frt. alld	lb.	.17	—
dms. t.c.l. frt alld	lb.	.18¼	—
tanks frt alld	lb	14¼	—
Dipropylene glycol prices 1c. higher in West.			

Dipropylene glycol methyl ether, dms., c.l., dlvd. E	lb.	.20	—
dms., t.c.l., same basis	lb.	.21½	—
tanks, same basis	lb.	.18½	—
Dithiodibenzoic acid, dms., 1,000-lb. lots, works	lb.	1.80	—
Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.71	—
dms., smaller lots, frt. alld	lb.	.72	—
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld	lb.	.55	—
Ditridecyl phthalate, dms., c.l., frt. alld. E. of Rockies	lb.	.29¼	—
dms., l.c.l., same basis	lb.	.30¾	—
tanktrucks, 1,000 - 1,999 gals., same basis	lb.	.27¼	—
tanktrucks, 2,000 gals., same basis	lb.	.26¾	—
Divinylbenzene, 20-25%, dms., c.l., works, frt equald	lb.	.20	—
dms., t.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60%, dms., c.l., works, 100% basis	lb.	1.00	—
dms., t.c.l., works, 100% basis.	lb.	1.05	—
tanks, same basis	lb.	.90	—
Dodecenyl succinic anhydride dms., c.l., t.l., dlvd. E	lb.	.50	—
dms, l.c.l., l.t.l. same basis	lb.	.52	—
Dodecylbenzene, dms., c.l., f.o.b., works, frt equald	lb.	.134	—
dms., t.c.l., same basis	lb.	.144	—
tanks, same basis	lb.	.11	—
Dodecylphenol, c.l., frt. alld	lb.	.22½	—
dms., t.c.l., same basis	lb.	.23½	—
tanks, same basis	lb.	.20	—
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.			

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 25-lb.lots, frt. prepaid or alld.

Blue, FD&C, No. 1	lb.	15.65	-16.45
No. 2	lb.	15.65	-16.45
Green, FD&C, No. 1	lb.	15.65	-16.45
No. 2	lb.	19.60	-20.40
No. 3	lb.	31.30	-32.10
Red, FD&C, No. 2	lb.	3.60	- 4.40
No. 3	lb.	19.60	-20.40
No. 4	lb.	6.00	- 6.80
Yellow, FD&C, No. 5	lb.	3.75	- 4.55
No. 6	lb.	3.65	- 4.45

Dyes, coaltar, certified colors for drugs and cosmetics, 200-lb. and 1-lb. lots, dlvd.:

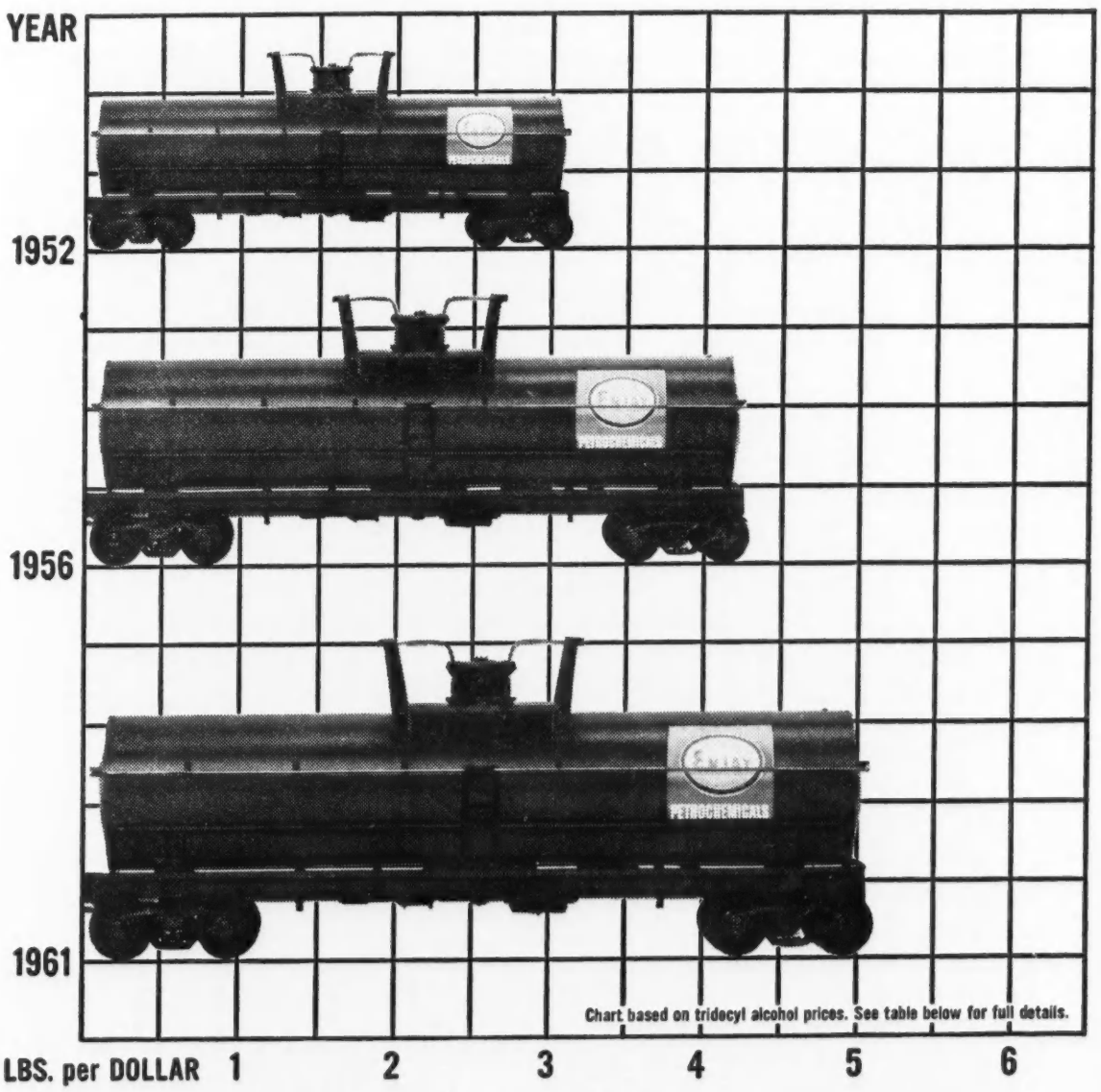
Black, D&C, No. 1	lb.	12.40	-13.00
Brown, D&C, No. 1	lb.	16.35	-16.95
Green, D&C, No. 5	lb.	17.00	-17.60
No. 6	lb.	17.40	-18.00
No. 7	lb.	14.35	-14.95
Orange, D&C, No. 3	lb.	10.50	-10.95
No. 4	lb.	19.60	-20.05
No. 5	lb	3.80	4.25
Red, D&C, No. 17	lb.	12.55	-13.15
No. 18	lb.	23.55	-24.15
No. 19	lb.	15.00	-15.45
No. 21	lb	3.90	4.35
No. 22	lb.	10.50	-10.95
No. 28	lb.	27.90	-28.50
No 33	lb.	17.00	-17.45
Violet, D&C, No. 2	lb.	15.65	-16.10
Yellow, D&C, No. 7	lb.	10.50	-10.95
No 8	lb.	10.50	-10.95
No. 10	lb.	15.10	-15.70
No. 11	lb.	14.80	-15.40

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb and 1-lb. lots, dlvd.:

Blue, Ext., D&C, No. 1	lb.	15.65	-16.10
Green, Ext., D&C, No 1	lb.	15.65	-16.10
Red, Ext., D&C, No. 1	lb	13.05	-13.50
Yellow, Ext, D&C, No. 1	lb	10.50	-10.95

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Color Index scale or prototype), contract dlvd No.

11110 Brilliant scarlet BN	lb.	1.79	—
13390 Fast blue SR	lb.	1.57	—
14025 Yellow 2G	lb.	1.32	—
14030 Orange R, extra, conc.	lb.	1.64	—
14645 Chrome black I	lb.	.77	—
14720 Rubine XX, conc	lb	1.76	—
15510 Orange Y, extra conc.	lb.	.83	—
15575 Orange RR	lb.	1.10	—
15620 Fast Red A, conc.	lb.	1.77	—
15705 Chrome blue black R, conc.	lb	1.12	—
16150 Scarlet 2RL	lb	1.22	—
16255 Brilliant scarlet 3RN, conc.	lb.	1.34	—
16230 Fast light, orange 2G	lb	1.39	—
17590 Brown PG	lb	3.00	—
18050 Phloxine 2G	lb	1.16	—
18055 Fuchsine 6B	lb	1.55	—
18965 Fast yellow 2G	lb	2.44	—
19140 Yellow XX	lb	2.48	—
19555 Yellow NN, conc.	lb	3.67	—
20170 Brown Y	lb	1.33	—
20470 Blue black, extra, conc	lb	1.44	—
21010 Brown, RX, conc	lb	1.42	—
22240 Scarlet B	lb.	2.81	—
22310 Red FC	lb.	1.57	—



LOWER PRICES MEAN YOUR DOLLAR BUYS UP TO 60% MORE ALCOHOL THAN IN 1952!

Expanded facilities, increased sales and production economies have enabled Enjay to pass substantial savings along to its oxo alcohol customers over the years. The table at right shows you how much more isooctyl, decyl, or tridecyl alcohol your dollar buys today as compared to 1952.

At the same time, the quality of Enjay alcohols is constantly being improved. Enjay also stands ready with technical assistance on any problems you may have. These are two added advantages of dealing with a leader in the chemical field.

For more information on the full line of Enjay alcohols and chemicals, write to Enjay, 15 West 51st Street, New York 19, N. Y.

YOUR ALCOHOL DOLLAR BUYS:	1952	1956	1961
ISOOCTYL (lbs.)	3.8	4.8	5.6
DECYL (lbs.)	3.6	4.8	5.6
TRIDECYL (lbs.)	3.1	4.2	5.0

EXCITING NEW PRODUCTS THROUGH PETRO-CHEMISTRY

ENJAY CHEMICAL COMPANY

A DIVISION OF HUMBLE OIL & REFINING COMPANY

ENJAY

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract, dlvd No.

22311	Brown MCW	lb.	1.59	—
22610	Blue 2B, extra conc	lb.	1.62	—
23500	Red 4BX, conc.	lb	1.80	—
24410	Sky blue FF, extra, conc	lb.	1.95	—
24895	Brilliant yellow, conc.	lb.	3.27	—
26360	Navy blue 3R, conc.	lb	1.84	—
26695	Black F, conc.	lb.	2.30	—
26900	Milling Red 3R, conc	lb	2.24	—
27075	Neutral black 2B, conc	lb.	2.75	—
27720	Gray L	lb.	2.29	—
29185	Fast scarlet 4BNC	lb	2.23	—
30015	Diazo black VJ conc.	lb	2.48	—
30045	Yellow brown K, extra	lb	1.45	—
30235	Black EB, 200%	lb	1.33	—
30295	Green BY conc.	lb	1.07	—
35630	Brown B	lb	2.89	—
37565	Naphthol SWF	lb	1.85	—
40000	Yellow 2G	lb	1.44	—
41000	Yellow OX	lb	2.45	—
42000	Green V crystals	lb	2.73	—
42040	Brilliant green G crystals	lb	3.62	—
42640	Violet 4BXN	lb	2.43	—
42090	Blue EG	lb	1.85	—
42100	Milling green 6B, conc.	lb	4.78	—
43830	Brilliant blue, BBG	lb	2.44	—
44045	Blue B, extra conc.	lb.	3.61	—
45170	Red BX	lb.	4.76	—
50415	Nigrosine SSJ	lb.	1.03	—
52015	Blue GXX	lb.	2.54	—
58005	Alizarin red SC	lb.	3.64	—
59700	Golden orange GFD, single paste	lb	2.70	—
59710	Flaming orange 6RD double powder	lb	4.90	—

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour index scale of prototype), contract dlvd No.

59800	Dark blue BO, single paste	lb.	2.28	—
59825	Jade green NC supra, double paste	lb.	1.75	—
61570	Alizarin green CG, extra	lb.	4.00	—
63010	Alizarin blue SAPG	lb	3.90	—
63615	Alizarin blue black B	lb	3.26	—
69825	Blue BLFD double paste	lb.	2.76	—
70800	Brown BR single paste	lb	2.03	—

Dyes, coaltar, oil-soluble, 100 lb drums, dlvd No

12140	Oil scarlet BL	lb.	1.87	—
12055	Oil orange 7078 V	lb.	1.38	—
26120	Oil red N 1700	lb.	1.94	—
42535B	Methyl violet base	lb.	1.88	—
44045B	Victoria blue base	lb.	4.06	—
50415B	Oil black 8603	lb.	.80	—
61565	Alizarin cyanine green base	lb.	6.13	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd., Black RB

		lb.	3.89	—
	Spirit brown GN	lb.	5.30	—
	Spirit orange R conc.	lb.	5.87	—
	Spirit red B conc.	lb	6.41	—
Pr 517	Spirit yellow 2R conc	lb	4.62	—
Pr 554	Spirit blue THN	lb.	5.06	—

E

	Echinacea root, bls.	lb.	1.25	—
	Elm bark, grinding, bls.	lb.	.30	.32
	Powd., bbls., bxs.	lb.	.60	—
	Select, bundles	lb.	.75	—
	Emetine hydrochloride, USP, bots	oz.	48.40	—
	Endrin, tech., dms., 100-lbs. or more, 100% basis, dlvd	lb.	2.77	—
	Eosin red toner, bbls., works	lb.	1.95	—
	Ephedrine, syn., USP, anhyd., bots, 100-oz.lots	oz.	.98	1.00
	hydrous, bots., 100-oz. lots,	oz.	.92	—
	Ephedrine hydrochloride, NF, dms., 100-oz., f.o.b. works	oz.	.75	—
	Ephedrine sulfate, USP, cryst., dms., 100-oz. f.o.b. works	oz.	.73	—
	USP, powd., dms., 100-oz., same basis	oz.	.73	—
	Epichlorohydrin, dms., c.i., dlvd	lb.	.29½	—
	dms., l.c.l., dlvd.	lb.	.31	—
	tanks, dlvd.	lb.	.27	—
	Epinephrine base, syn., USP, bots., 100 gram lots	gram.	.58	—
	Epsom salt (see Magnesium sulfate).			
	Erigeron oil cns.	lb.	11.00	—
	Ergot, NF, dms., tin-lined	lb.	2.00	2.50
	Eserine salicylate, bots.	oz.	34.50	40.00
	Eserine sulfate, bots.	oz.	26.00	—
	Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va	lb.	.18½	—
	Ester gum, wood-rosin type, dms., c.l. same basis	lb.	.18½	—
	Ether (see specific product).			
	Ethyl acetate, nat., ferment, 85-88%, dms., c.i. dlvd	lb.	.15	—
	dms., l.c.l., dlvd.	lb.	.16½	—
	tanks dlvd	lb.	.12½	—
	95-98% dms. c.i., dlvd.	lb.	.15¼	—
	dms., l.c.l., dlvd.	lb.	.16¾	—
	tanks dlvd	lb.	.12¾	—
	99%, dms., c.i., dlvd	lb.	.15½	—
	dms., l.c.l., dlvd.	lb.	.17	—
	tanks, dlvd.	lb.	.13	—
	Ethyl acetate, syn., 85-88%, dms., c.l., dlvd	lb.	.16	—
	dms., l.c.l., dlvd.	lb.	.16¼	—
	tanks, dlvd.	lb.	.12½	—
	95-98%, dms., c.l., dlvd	lb.	.15¼	—
	dms., l.c.l., dlvd	lb.	.16¾	—
	tanks dlvd	lb.	.12¾	—
	99%, dms., c.l., dlvd	lb.	.15½	—
	dms., l.c.l., dlvd.	lb.	.17	—
	tanks, dlvd.	lb.	.13	—
	Ethyl acetoacetate, dms., c.l., dlvd.	lb.	58½	—
	dms., l.c.l., dlvd.	lb.	.60	—
	tanks, dlvd	lb.	.56	—
	Ethyl acrylate, dms., c.l., t.l., dlvd.	lb.	.34¾	—
	dms., l.t.l., dlvd	lb.	.35¾	—
	tanks, dlvd.	lb.	.32¼	—
	Ethyl alconol, 190 pf., USP, tax paid dms. c.l., dlvd E of Rockies	gal.	20.63	—
	dms. l.c.l. same basis	gal.	20 73	20.84
	USP, tax-free, dms., c.l., dlvd. E. of Rockies	gal.	.68	—
	Ethyl alcohol, 190 pf., USP, tax free, dms., l.c.l., same basis	gal.	.73	.79
	tanks, same basis	gal.	.52	—
	Ethyl alcohol, absolute 200 pf., tax paid. dms. dlvd E of Rockies	gal	21 75	—
	dms., l.c.l., same basis	gal.	21 85	21 96
	tanks, same basis	gal	21 59	—
	Ethyl alcohol denatured (see Denatured alcohol ethyl)			
	Ethyl aminobenzoate, USP (see Benzocaine).			
	Ethyl amyl ketone dms. c.l., dlvd.	lb.	.20	—
	dms. l.c.l. same basis	lb.	21½	—
	tanks, same basis	lb.	17½	—
	Ethyl benzoate bots.	lb.	.75	1 00
	Ethyl bromide tech., 98%, dms., c.l., frt alld, E	lb.	.43	—
	dms. l.c.l. frt alld E	lb.	.45	—
	tanks, frt, alld. E	lb.	.40	—
	2-Ethyl butyl alcohol, dms., c.l., works	lb.	.30	—
	dms., l.c.l., works	lb.	.30¾	—
	tanks, works	lb.	.28	—
	Ethy butyl ketone dms. c.l., t.l., works	lb.	.36	—
	dms l.c.l., t.l. works	lb.	.36¾	—
	tanks, works	lb.	.34	—
	Ethyl butyrate dms. works	lb.	.85	1.00
	Ethyl carbamate (see Urethane)			
	Ethyl cellulose, vis. 4 cps. ngs., 5,000 lb lots or more, frt. alld E	lb.	.73	—
	ngs smaller ots frt allo E	lb.	.75	—
	vis. 10, 20, 50, 100, 150 cps. bgs., 5,000-lb lots or more, frt. allo E	lb.	.68	—
	vis., 10.20.50.100.150 cps., bgs., smaller lots, frt. allo. E	lb.	.70	—
	Ethyl chloride tech. cyls. works	lb	.20	.22
	dms., works	lb	.18	.20
	tanks, works	lb	.10	—
	Ethyl cinnamate, cns	lb.	3.35	3.50
	Ethyl ethanolamines, mixed, dms., c.i., dlvd E	lb.	.43½	—
	dms., l.c.l. dlvd E	lb.	.44½	—
	tanks dlvd E	lb	.41½	—
	Ethyl ether, absolute ACS dms	lb.	.27	—
	Anesthesia USP dealers, 1-lb cns	lb	1.01	—
	½ lb cns	lb	1.09	—
	¼-lb cns	lb	1.21	—
	Indust. dms. c.i. dlvd.	lb.	.13½	—
	dms., l.c.l., dlvd E	lb.	.15	—
	tanks, dlvd E	lb.	.11	—
	2-Ethyl hexoic acid dms., c.i., t.i., dlvd E	lb.	.37	—
	dms., l.c.l., t.l. dlvd E	lb.	.38½	—
	tanks, dlvd E	lb.	.34½	—
	2-Ethyl hexoic acid 1c. higher W. of Rockies.			
	2-Ethylhexyl acrylate, dms., c.i. t.i., straight or mixed frt. allo. E	lb.	.39½	—
	dms., l.t.l., same basis	lb.	.40½	—
	tanks, same basis	lb.	.37	—
	2-Ethylhexyl alcohol, dms., c.l., dlvd. E	lb.	.20½	—
	dms., l.c.l., dlvd. E	lb.	.22	—
	tanks, dlvd. E	lb.	.18	—
	Ethyl iodide chys. works	lb	3.30	—
	Ethyl methacrylate dms. c.i., frt. equald	lb	.52	—
	dms., t.t.l. frt equald	lb.	.52½	—
	tanks, frt. equald	lb	.50	—
	Ethyl morphine hydrochloride, USP bots	oz.	11.85	—
	Ethyl oenanthate, dms	lb	1.05	1.30
	Ethyl oxalate (see Diethyl oxalate).			
	Ethyl silicate, dist (see Tetraethyl orthosilicate).			
	Ethyl silicate 40% available SiO_2, dms., c.i., dlvd. E	lb.	.40	—
	dms., l.c.l., dlvd. E	lb.	.50½	—
	tanks, dlvd. E	lb.	.47	—
	N-Ethyl-a-naphthylamine, dms. works	lb	1.04	—
	N-Ethyl-m-toluidine, tech., aq., tanks frt allo	lb	.83	—
	N-Ethyl-o-toluidine, bbls	lb.	.88	—
	Ethylamine (see Mono- Di- or Tri-)			
	N-Ethylaniline, dms. c.i. frt. allo.	lb.	.57	—
	dms., l.c.l., frt. allo	lb.	.58	—
	tanks, frt. allo	lb.	.55	—
	Ethylbenzene, 99% dms., c.i., t.i., frt. equald	lb.	.14	—
	dms., l.c.l., same basis	lb.	.16	—
	tanks, same basis	lb.	.11½	—
	Ethylene, contract refy gate	lb.	.0473	.0529
	Ethylene dibromide dms., c.i., frt. equald	lb.	.30½	—
	dms., l.c.l. frt. equald	lb.	.31½	—
	tanks, frt equald	lb.	.28½	—
	Ethylene dichloride dms. c.i. dlvd.	lb	.11½	—
	dms., l.c.l., same basis	lb.	.13	—
	Ethylene dichloride, tanks, same basis	lb.	.09	—
	Ethylene dichloride prices W of Rockies, 1c. per lb higher			
	Ethylene glycol, indust. dms., c.i., dlvd E	lb.	.16	—
	dms., l.c.l., same basis	lb.	.17½	—
	tanks, same basis	lb.	.13½	—
	Ethylene glycol monobutyl ether, dms. c.i., dlvd E	lb.	.22	—
	dms., l.c.l., dlvd E	lb.	.23½	—
	tanks, dlvd E	lb.	.19½	—
	Ethylene glycol monoethyl ether, dms. c.i. dlvd. E	lb.	.21	—
	dms., l.c.l., dlvd. E	lb.	.22½	—
	tanks, dlvd E	lb.	.18½	—
	Ethylene glycol monoethyl ether acetate, dms., c.i., dlvd. E	lb.	.19½	—
	dms., l.c.l., dlvd. E	lb.	.21	—
	tanks, dlvd E	lb.	.17	—
	Ethylene glycol monomethyl etner, dms., c.i., dlvd. E	lb.	.21	—
	dms., l.c.l., dlvd E	lb.	.22½	—
	tanks, dlvd E	lb.	.18½	—
	Ethylene glycol monomethyl ether acetate, dms., c.i., works	lb.	.29	—
	dms., l.c.l., works	lb.	.29¾	—
	tanks, works	lb.	.27	—
	Ethylene glycol monostearate, flake, 150-lb. ctn	lb.	.33	—
	Ethylene oxide, dms. c.i. dlvd E.	lb.	.21½	—
	dms., l.c.l., dlvd E	lb.	.24½	—
	tanks, dlvd E	lb.	.15½	—
	Ethylene trichloride (see Trichloroethylene).			

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Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .40 - —
dms., t.c.l., dlvd. E., 100% basis. lb. .41½- —
tanks, dlvd. E., 100% basis lb. .38 - —
Ethylvanillin, 100-lb. fib. dms., 500-lb. 6.75 - —
less than 500-lb. lb. 7.40 - —
Eucalyptol, USP, cns., dms lb. .85 1.40
Eucalyptus oil, NF, rectified, 70-75% dms lb. .45 —
NF, rectified, 80-85%, dms. lb. .53 - .62
USP, dms. lb. 1.90 - —
Eugenol, USP, dms. lb. 1.90 - 2.50
Euphorbia herb, bls. lb. .12 .15

F

F salt paste, tech., dms., works lb. 2.50 - —
Fennel oil, sweet, USP, cns. lb. 2.60 - —
Fennel seed, Argentine, bgs. lb. .16 - —
French, light, bgs. lb. .16½- —
Indian, light, bgs. lb. .16½- —
Yugoslav, light, bgs. lb. .17½- —
Fenugreek seed, Moroccan, bgs. lb. .12 - —
Ferric chloride, anhyd., tech., 350-lb. dms., c.l., works 100 lbs. 8.00 - —
dms., t.c.l., works 100 lbs. 9.00 - —
Ferric chloride 42° Be., photo grade, dms., c.l., works 100 lbs. 7.25 - —
sewage grade, tanks, frt. equald. 100% basis 100 lbs. 4.00 —
USP cryst. dms. t.l. works lb. .03½- —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF, 175-lb. dm lb. 4.25 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E lb. 1.30 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran. pearls, 225-lb. dm lb. .79 - —
Ferric resinate, dms., ton lots, frt. alld lb. .45 - —
Ferric stearate dms., c.l., frt. alld. lb. .39 - —
dms., t.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l., works ton. 35.25 —
bgs., t.c.l., works ton. 36.25 - 42.25
bulk, c.l., works ton. 33.25 - —
Ferric-amonium citrate, NF, brown, gran., 100-lb. dms lb. .68 - —
NF, green, gran., 100-lb. dms., frt. equald lb. .68 - —
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., 250-lb dm., f.o.b. works lb. .32½- —
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald lb. .98 - —
Ferrous sulfate, gran., bgs., c.l., works ton. 34.50 - —
bgs., t.c.l., dlvd. Metropolitan area, 100 lbs. 3.35 - 4.25
bbls., c.l., works ton. 40.00 - —
bulk, c.l., works ton. 27.00 - —
USP cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, bbls. gal. 34.00 - 35.00
Oregon bbls gal. 3.40 - 4.64
Fir oil, Canada, cns lb. 1.70 - 1.75
Fish oil, refd., alkali, dms. lb. .1380- .1430
Kettle-bodied, dms. lb. .1530- .1580
Light-pressed, dms. lb. .1280- .1330
tanks lb. .1080- —
Fishliver oil, nat., high potency, 100,000 to 1,500,000 A units per gram, dms 1,000,000 units. .12 - —
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic and Gulf coasts ton. 122.50 - 125.00
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic and Gulf coasts. ton. 113.50 - 121.00
Fleaseed (see Psyllium seed).
Folic acid, USP, bots., fib. dms., kilo lots or more gram .25 - —
10% feed grade fib dms., 3 kilos or more kilo. 30.00 - 44.00
Formaldehyde, 37% (inhibited, 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0690- —
tanks, dlvd. lb. .0430- —
37% (inhibited, 7% methanol) tanks, dlvd lb. .0405- —
41% (1% methanol), tanks lb. .0446- —
37%, methanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85%, cbys., c.l., works. lb. .1570- —
cbys., t.c.l., works lb. .1620- .1720
90% cbys., c.l., works lb. .1625- —
cbys., t.c.l., works lb. .1675- .1775
Fringetree bark, bls lb. .65 - .70
Fumaric acid, tech., 250-lb. dms., c.l., frt. equald lb. .22¾- —
dms., t.c.l., frt. equald lb. .24¼- —
Fumaric acid in bags ½c. per lb. less.
Furfural, dms. c.l. works lb. .13 - —
dms., t.c.l., works lb. .14 - —
tanks, dvd. E lb. .11½- —
tanks, dlvd. W lb. .12½- —
Furfuryl alcohol, cns., works lb. .28 - —
dms., c.l., t.l., Newark, N. J lb. .19½- —
dms., t.c.l., t.l., Newark, N. J lb. .20½- —
dms., c.l., t.l., Memphis, Tenn lb. .18 - —
dms., t.c.l., t.l., Memphis, Tenn. lb. .19 - —
tanks, dlvd. E. of Denver lb. .175 - —
Fusel oil, refd., dms., c.l., dlvd lb. .18 - —
dms., t.c.l., dlvd. lb. .19½- —
tanks, dlvd. lb. .15½- —

G

G salt, bbls., frt. alld., 100% basis lb. .73 - —
Gallic acid, NF VII, bbls., 1,000-lb. lots lb. 2.00 - —
bbls., smaller lots lb. 2.02 - 2.22
Tech., bbls., 1,000-lb. lots lb. 1.78 - —
bbls., smaller lots lb. 1.80 - 2.00
Gamma acid, dry grd., bbls., frt. alld lb. 1.75 - —
Gammapicoline (see g-picoline).
Garlic oil, dom., bots. oz. 4.50 - 4.75
Imp., bots oz. 4.50 - 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible 75 AOAC test, bbls., c.l., dlvd lb. .53 - —
150 AOAC test, bbls., c.l., dlvd. lb. .64 - —
200 AOAC test, bbls., c.l., dlvd. lb. .70 - —
225 AOAC test, bbls., c.l., dlvd. lb. .74 - —
275 AOAC test, bbls., c.l., dlvd. lb. .82 - —
Geisemium root, bls. lb. .30 - .35
Gentian root, bls. lb. .24 - —
Grd., bbls., bxs. lb. .30 - —
Powd., bbls., bxs. lb. .30 - —
Geraniol, extra, cns., dms. lb. 1.75 - 2.40
Soap grade, dms. lb. .90 - 1.75
Standard, cns., dms. lb. 1.65 - —
Synthetic, dms lb. 1.30 - —
Geranium oil, Algerian, cns. lb. 21.00 - 24.00
Bourbon, cns. lb. 11.75 - 14.00
Turkish (see Palmarosa oil).
Geranyl acetate, cns. lb. 1.90 - 2.70
Synthetic, dms lb. 1.45 - —
Ginger oil, dist., bots. lb. 12.00 - 14.00
Ginger oleoresin, NF, from African root, bots lb. 4.25 5.00
NF, from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs. lb. .30 - —
Jamaican, No. 3, bgs. lb. .40 - —
Nigerian, split, bgs. lb. .30 - —
Sierra Leone, bgs. lb. .35 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50%, dms., c.l., t.l., f.o.b. works lb. .18½- —
dms., t.c.l., f.o.b. works lb. .19½- .21
tanks, f.o.b. works lb. .15½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .16 —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, green, 40 jellygrams, bgs., c.l., same basis lb. .16 - —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, t.c.l., prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .18 - —
95-149, bgs., c.l., dlvd lb. .19 - —
122-149, bgs., c.l., same basis lb. .20½- —
150-177, bgs., c.l., same basis lb. .22½- —
178-206, bgs., c.l. same basis lb. .25 - —
207-236, bgs., c.l. same basis lb. .28 - —
237-266, bgs., c.l., same basis lb. .30½- —
267-293, bgs., c.l., same basis lb. .32½- —
299-330, bgs., c.l., same basis lb. .34½- —
331-362, bgs., c.l., same basis lb. .36½- —
363-394, bgs., c.l., same basis lb. .38 - —
395-427, bgs., c.l., same basis lb. .40 - —
428-460, bgs., c.l., same basis lb. .42 - —
461-494, bgs., c.l., same basis lb. .44 - —
495-529, bgs., c.l., same basis lb. .46 - —
Hide glue, t.c.l. prices 2c. higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb. lots, frt alld lb. 1.80 - —
fib. dms. 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots. kilo. 150.00 - 300.00
Bots., 50-kilo lots kilo. 100.00 - —
Bots., 500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification 88% tanks dlvd. lb. .13 - .13¼
nat., crude, soaplye 80%, tanks, dlvd. lb. .12 - .12¾
nat., refd. USP CP, 99%, dms., c.l., dlvd lb. .26¾- —
dms., t.c.l., dlvd lb. .27¼- —
tanks, dlvd. lb. .24¾- —
Glycerine, dom., nat., refd., USP, CP, 96%, dms., c.l., dlvd lb. .25½- —
dms., t.c.l., dlvd. lb. .26¼ —
tanks, dlvd. lb .23¾ —
nat., high gravity, dms., c.l., dlvd lb. .26¼ —
dms., t.c.l., dlvd lb. .27 —
tanks, dlvd. lb. .24½ —
Glycerine, dom., refd., syn., 99.5%, dms., c.l., dlvd lb. .26½- —
dms., t.c.l., dlvd lb. .27¼- —
tanks, dlvd. lb. .24¾- —
Imp., nat. crude, soapiye, 80%, c.i.f. lb. .12 - .12¼
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glyceryl guaiacolate, 100-lb fib. dm., dlvd lb. 4.00 —
25-lb. fib. dm. dlvd. lb 4.25 —
Glycolic acid (see Hydroxyacetic acid).
Glycolonitrile, 70% aqueous, dms., c.l., t.l., works lb .40 —
dms., t.c.l., same basis lb .42 —
tanks, same basis lb .39 —
Glyoxal, 30%, dms., c.l., works lb 20½ —
dms., t.c.l., works lb 21¼ —
tanks, works lb .18 —
Golden seal root, NF, tested, bls. lb 2.90 3.00
Gramicidin, 1 to 5 kilos, f.o.b. works gram 4.25 —
Grapefruit oil, dms lb 2.40 2.60

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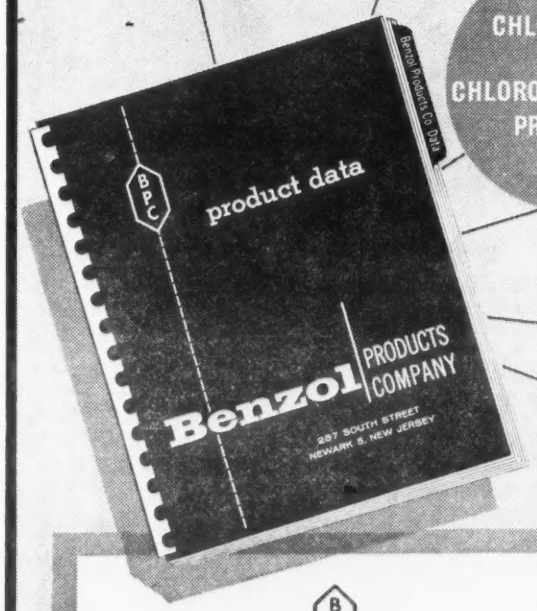

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Cryst., 88-90% powd., bgs., fib. dms., ex whse	lb.	.19 -	.21½
90-92%, powd., bgs., fib. dms., ex whse	lb.	.21 -	.24½
Cryst., 95-97%, powd., bgs., fib. dms., ex whse	lb.	.29 -	.31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb.	.29 -	.31
Grease, white, choice all hog, tanks, dlvd	lb.	.07½-	.07⅝
Yellow, tanks, dlvd	lb.	.05⅛-	—
Grease oil, No. 1, dms., c.l., f.o.b. Chicago	lb.	.12 -	—
dms., l.c.l., same basis	lb.	.14 -	—
tankcars, same basis	lb.	.10½-	—
extra, winter, strained, dms., c.l., Chicago	lb.	.15 -	—
dms., l.c.l., same basis	lb.	.17 -	—
tankcars, same basis	lb.	.13½-	—
prime, burning, dms., c.l., same basis, Chicago	lb.	.17 -	—
dms., l.c.l., same basis	lb.	.19 -	—
tankcars, same basis	lb.	.15½-	—

Other areas ¾c. higher, except Texas and West Coast, 1¼c. higher.

GREEN PIGMENTS

Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb, bls.	lb.	.40 -	—
Guaiacol, NF, cryst., dms., tins	lb	2.10	2.15
liq., cbys., dms.	lb.	2.30 -	2.40
Guaiacwood oil, cns.	lb.	.65 -	.80
Guaiacol carbonate, NF VII, dms	lb	3.40	3.45
Guar gum, edible, bgs., c.l., f.o.b. shipt. pt	lb.	.38 -	—
bgs., l.c.l. same basis	lb.	.40 -	.42
Indust., bgs., c.l., same basis	lb.	.32 -	—
Tech., bgs., c.l., same basis	lb.	.30 -	—

GUMS

Gum quotations are listed individually. For example, prices on Gum, Arabic may be found in the A's under Arabic gum.

H

H acid, dry, bbls. c.l., frt. alld., 100% basis	lb.	1.00 -	—
bbls., l.c.l., same basis	lb.	1.05 -	—
Hansa yellow 10 G, bbls., dlvd. E. of Rockies	lb	2.45	—
Hansa G yellow, pigment, bbls., same basis	lb.	2.20 -	—
Hawthorn berries, bgs.	lb.	.18	.20
Heliotropin, 100-lb lots, dms.	lb.	2.60	3.40
Hellebore root, dom., green, bls	lb.	.70	.75
Helonias root, bls.	lb.	1.50 -	—
Hemlock oil, cns.	lb.	2.55	3.00
Henbane leaves, bls.	lb.	.40 -	.45
Heptachlor, dms., c.l., t.l., frt. alld., 100% basis	lb.	.96 -	—
Heptane, indust., tankcars, New Jersey and New York	gal.	.20 -	—
Houston, Texas	gal.	.1625-	—
Hesperidin, purif., 50 kilos, f.o.b. works	kilo.	19.70 -	—
Hesperidin methylchalcone, 50 kilos, f.o.b. works	kilo.	49.25 -	—
Hexachlorophene, dms., 1,100 lbs. or more	lb	1.84 -	—
dms., to 1,100 lbs.	lb.	1.94 -	—
Hexalin (see Cyclohexanol).			
Hexamethylenetetramine, tech., bgs., 20,000-lb lots or more, Perth Amboy or New York City	lb.	.233 -	—
bgs., 1,000-19,999-lb. lots, same basis	lb.	.243 -	—
bgs., smaller lots, same basis	lb.	.253 -	—
fib. dms., 1,000-lb. lots or more, same basis	lb.	.250 -	—
fib dms., smaller lots, same basis	lb.	.253 -	—
USP, bgs, 500 lbs. or more, f.o.b. Fords, N. J., dlvd. New York City and Philadelphia	lb.	.42½-	½ —
bgs., smaller lots, same basis	lb.	.43½-	.48½
Hexane, industrial, tankcars, New Jersey and New York	gal.	.20 -	—
Houston, Texas	gal.	.16 -	—
1-Hexanol, dms., c.l., works	lb.	.35 -	—
dms., l.c.l., works	lb.	.35¾-	—
tanks, works	lb.	.33 -	—
Hexyl cinnamic aldehyde, dms	lb.	3.95 -	4.00
n-Hexyl methacrylate, dms., c.l., works	lb.	.75½-	—
dms., l.c.l., works	lb.	.76 -	—
Hexyl salicylate, dms.	lb.	1.70 -	1.75
Hexylene glycol, dms., c.l., dlvd	lb.	.17½-	—
dms., l.c.l., dlvd.	lb.	.19 -	—
tanks, dlvd.	lb.	.15 -	—
Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd	lb.	14.00 -	—
dms., smaller lots, dlvd.	lb.	14.50 -	—
Homatropine hydrobromide, USP, bots.	oz.	3.25 -	—
methylbromide, USP, bots.	oz.	3.00 -	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago	unit-ton	6.75 -	—
Horehound herb, bls.	lb.	.18 -	.20
Hydrastis (see Goldenseal.)			
Hydrazine hydrate, 85%, 240-lb. dms., c.l., works	lb.	1.28 -	—
240-lb. dms., l.c.l., works	lb.	1.35 -	1.55
Hydriodic acid, purif., 47%, 2-cbys., f.o.b. works	lb.	2.92 -	—
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼-	—
dms., l.c.l., dlvd. zone 1	lb.	.29¾-	.30¼
tanks, dlvd. zone 1	lb.	.27¼-	—

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.

Hydrobromic acid, medicinal, 48%, cbys., frt. equald	lb.	.48 -	.56
Hydrochloric acid, anhyd. (see Hydrogen chloride.)			
Hydrochloric acid, CP, USP, consumers, cbys, extra, c.l., works	lb.	.15¾-	—
cbys, l.c.l., same basis	lb.	.17¼-	.17⅞
5-pint bots., extra cs. c.l., same basis	lb.	.20¾-	—
Hydrochloride acid, 18°, cbys., c.l., works 100 lbs.		2.50 -	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90 -	3.00
tanks, works, frt. equald ton		28.00 -	—
Hydrochloride acid, 20° cbys., c.l., works 100 lbs.		2.75 -	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.15 -	—
20°, tanks, works, frt. equald ton		30.00 -	—
22°, cbys., c.l., works 100 lbs.		3.25 -	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65 -	—
tanks, works frt. equald ton		35.00 -	—
Hydrocortisone acetate, bulk, bots., kilo lots or more	gram.	.85 -	.90
Hydrocortisone alcohol, bulk, bots., kilo lots or more	gram.	1.00 -	1.90
Hydrocyanic acid, dilute, NF, 2%, 5-pint bots., f.o.b. works,	pint.	.70 -	—
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)			
Hydrofluoric acid, aqueous, 70%, 55-gal. or 30-gal. dms., c.l., t.l., dlvd	100 lbs.	17.25 -	—
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., l.c.l., t.t.l., dlvd	100 lbs.	18.75 -	—
20-gal. dms., c.l., t.l., dlvd	100 lbs.	19.00 -	—
20-gal., dms., l.c.l., t.t.l., dlvd.	100 lbs.	20.50 -	—
tanks, works frt. equald	100 lbs.	11.50 -	—

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.75 per cwt. for drum delivery

Hydrofluosilicic acid, dms., works, 30% basis	lb.	.07 -	—
Hydrofuramide, dms., fib. ctns., works	lb.	.30 -	.40
50-lb. cyls., l.c.l., works	lb.	.55 -	.60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.45 -	—
Hydrogen cyanide, liq., 98% tanks, works	lb.	.13 -	—
Hydrogen fluoride, anhyd., cyls., dlvd. E	lb.	.29 -	.31
cyls., dlvd. W	lb.	.37 -	—
tanks, works	lb.	.16 -	—
Hydrogen peroxide, 35%, dms., c.l., dlvd	lb.	.202 -	—
dms., l.c.l., dlvd.	lb.	.211 -	—
tanks, dlvd	lb.	.1800-	—
Hydroquinone, photo grade, dms., 50-lbs. f.o.b. works	lb.	1.10 -	—
Tech., dms., c.l., dlvd.	lb.	.82½-	—
dms., l.c.l., dlvd	lb.	.84½-	—
Hydroquinone monomethyl ether, dms., t.l. dlvd	lb.	2.59 -	—
dms., l.t.l., dlvd	lb.	2.61 -	—
Hydroxyacetic acid, tech., 70% dms., Philadelphia and Chicago	lb.	.11 -	—
tanks, Belle W Va	lb.	.073 -	—
Hydroxycitronellal, cns.	lb.	5.25 -	8.65
Hydroxyethyl cellulose, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point	lb.	.69 -	—
fib. dms. 2,000 to 19,999-lb lots, same basis	lb.	.77 -	—
Hydroxyethyl cellulose fib., dms., 100 to 1,999-lb. lots, basis	lb.	.81 -	—
fib. dms., smaller lots, same	lb.	1.01 -	—
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide, bots.	oz.	7.75 -	8.50
Hyoscyamine sulfate, bots	oz.	7.75 -	8.50
Hypophosphorous acid, purit., 50%, 10-cbys. f.o.b works	lb.	1.95 -	—
NF, 50%, 10-cbys., same basis	lb.	1.35 -	—

I

Ichthammol, NF, dms	lb.	.75 -	1.05
Indigo (see Dyes, Coaltar, 1171 indigo, syn.).			
Indole, CP, bots	lb.	13.65 -	15.00
Inositol, 50-100 lb. dms., 1,000 lbs. or more dlvd	lb.	4.50 -	—
50-lb. dms., less than 1,000 lb., dlvd	lb.	4.75 -	—
10 lb. cns., 10-50 lbs., dlvd.	lb.	5.00 -	—
5 lb. bots., dlvd.	lb.	5.25 -	—
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs.	lb.	1.10 -	—
Resub., USP, dms., f.o.b. works	lb.	2.20 -	2.22
Iodochlorohydroquinolin, USP, dms.	lb.	3.60 -	—
Iodoform, NF, dms., 300-lbs., fo.b. works	lb.	4.90 -	—
dms., 100-lb., same basis	lb.	5.05 -	—
a-Ionone, cns.	lb.	4.60 -	5.75
b-Ionone, cns.	lb.	4.15 -	6.15
Ipecac root, whole, bgs.	lb.	7.75 -	8.00
Powd., bbls., bxs.	lb.	9.00 -	9.25
Irish moss, bleached, prime, bls	lb.	.35 -	—
Iron blue, alkali resistant, bbls., c.l., dlvd. E	lb.	.60 -	—
bbls., l.c.l. ton lots, same basis.	lb.	.61 -	—
bbls., smaller lots, same basis.	lb.	.62 -	—
Dom., reg. bbls., c.l., same basis.	lb.	.55 -	—
bbls., l.c.l., ton lots, same basis.	lb.	.56 -	—
bbls., l.c.l., smaller lots same basis	lb.	.57 -	—

Iron blue dlvd. prices 1c higher for Pacific Coast states: Wash., Ore., Cal., N M., Ariz., Mont. Wyo. Utah, Col and Nev

Iron compounds (see Ferric or Ferrous).			
Iron oxide, black, pure, bgs., c.l., works	lb.	.14¾-	—
bgs., l.c.l., works	lb.	.15 -	—
Iron oxide, brown, pure, bgs., c.l., works	lb.	.15¾-	—
bgs., l.c.l., works	lb.	.16 -	—

Suppose you had to write on birch bark

Birch bark was the best material Indians could find on which to paint their picture-messages. But when modern-day paper manufacturers included bark, birch or otherwise, in making groundwood pulp for paper, printing quality was poor.

The groundwood method produces twice as much pulp per cord of wood as other processes, but its low color was a drawback limiting its field of usefulness. In the 1940's Becco worked out a Hydrogen Peroxide bleach producing a superior brightness with improved softness and bulk as well. As a result, a good many manufacturers continue to use Becco to make groundwood paper a more desirable product.

Do you have an interest in groundwood or chemical pulps? Becco, with more years of bleaching experience than any other peroxide manufacturer, can help you. Address: Dept. OPDR-61-2.

BECCO Hydrogen Peroxide

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION

Becco Chemical Division

General Sales Offices:

161 EAST 42nd STREET, NEW YORK 17, N.Y.

Iron oxide, metallic, brown, l.c.l., bgs., works lb. .05¾- —
Iron oxide, Persian Gulf, red., bgs., l.c.l., works lb. .09½- —
Iron oxide, red, dom., pure, bgs., c.l., Bethlehem, E. St. Louis, New York City lb. .14¼- —
bgs., l.c.l., same basis lb. .14½- —
Iron oxide, yellow, nat., French type, bgs., l.c.l., works lb. .07 - —
Peruvian type, bgs., l.c.l. lb. .025 - —
Iron oxide, yellow, pure, light lemon shade bgs., c.l., works lb. .12½- —
bgs., l.c.l., same basis lb. .12¾- —
Other shades, bgs., c.l., same basis lb. .12 - —
bgs., l.c.l., same basis lb. .12½- —
Isoamyl alcohol, dms., c.l., works, frt. alld E lb. .27½- —
Isoamyl alcohol, dms., l.c.l., same basis lb. .29 - —
tanks, same basis lb .25 - —
Isoborneol cns lb 1.44 - 1.80
Isobornyl acetate cns. lb 46 .56
Isobornyl formate, dms lb. 1.15 1.20
Isobornyl propionate, dms lb. 1.20 1.25
Isobutyl acetate, perfume grade, cns lb. .30 .35
Solvent grade, dms., c.l., divd E, of Rockies lb. .15¼- —
dms., t.c.l., same basis lb. .16¾- —
tanks, same basis lb. .12¾- —
Isobutyl alcohol, dms., c.l., divd lb. .15½- —
dms., t.c.l., divd lb. .17 - —
tanks, divd lb. .13 - —
Isobutylene, 99% tanks, works gal. .38 - —
Isobutyl isobutyrate, dms., t.o.b. works lb. .75 - —
Isobutyraldehyde, tech., dms., c.l., divd lb. .22 - —
dms., t.c.l., divd. lb. .23½- —
tanks, divd. lb. .19½- —
Isobutyric acid, dms. c.l., t.l., divd. lb. .35 - —
dms., t.c.l., t.t.l., same basis lb. .36½- —
t.c. t.t., same basis lb. .33 - —
Isobutyronitrile, d.ns., c.l., divd. lb. .47½- —
dms. t.c.l., divd lb. .48½- —
tanks, divd lb. .45 - —
Isoeugenol cns. lb. 3.10 - 3.40
Isoniazid, powd., bulk, 50 kilos kilo. 12.00 - —
Isonicotinic acid, 100-lb fib. dms., works lb. 4.25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Iso-octyl alcohol, dms., c.l., divd. E. lb. .20½- —
dms., t.c.l., divd. E lb. .22 - —
tanks, divd. E lb. .18 - —
Iso-octyl isodecyl phthalate, dms., c.l., frt. alld. E lb. .25½- —
dms., t.c.l., same basis lb. .27 - —
tanktrucks, 1,000 - 1,999 gals., same basis lb. .23½- —
tanktrucks, 2,000 gals., same basis lb. .23 - —
Isopentane, comi. grade, tanks, f.o.b. Tex. refy gal. .16½- —
Isophorone, dms., c.l., divd. lb. .25 - —
dms., t.c.l., divd. lb. .26½- —
tanks, divd lb. .22½- —
Isophthalic acid, dms., c.l., works, frt. equald lb. .14½- —
dms., t.c.l., same basis lb. .15½- —
Isopropanol (see Isopropyl alcohol).
Isopropyl acetate, dms., c.l., divd. lb. .14 - —
dms., t.c.l., same basis lb. .15½- —
tanks, same basis lb. .11½- —
Isopropyl alcohol, refd., 91%, dms., c.l., divd gal. .58 - —
dms., t.c.l., divd. gal. .68 - —
tanks, divd. gal. .42 - —
Isopropyl alcohol, 95%, c.l., dms., divd gal. .60 - —
dms., t.c.l., divd. gal. .70 - —
tanks, divd gal. .44 - —
Anhyd., c.l., divd. gal. .62 - —
dms., t.c.l., divd. gal. .72 - —
tanks, divd gal. .46 - —
Isopropyl benzene (see Cumene).
Isopropyl ether, dms., c.l., divd lb. .09½- —
dms. t.c.l., divd. lb. .11 - —
tanks, divd lb. .07 - —
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC) tech., dms., c.l., t.l., works lb. 1.00 - —
dms., t.c.l., works lb. 1.05 - 1.25
tanks, works lb. .99 - —
Isopropylamine (see Mono, Di, or Tri-).
Isopropyl-N-phenyl carbamate, 450-lb fib. dms., c.l., t.l., works lb. .75 - —
450-lb. fib. dms., t.c.l., works lb. .80 - .90
Isoquinoline, dms., works lb. .65 1.25
Itaconic acid, refd. bgs. c.l., t.o.b. works lb. .39½- —
bgs., t.c.l., same basis lb. .41 - .43
Tech., bgs., c.l., same basis lb. .34½- —
bgs., 500-lbs. same basis lb. .36 - —

J

J acid, paste, bbls., works, 100% basis lb 2.70 - —
Powd., bbls., same basis lb. 2.75 - —
Jalap root, NF, bls lb. .55 - .60
NF, powd., bbls., bxs lb. .65 - .70
Japan wax, cs lb. .29 - .31
Juniper berries, bgs lb. .25 - .30
Juniper berry oil, NF, bots. lb. 2.90 - 3.75
Twice rectified, bots. lb. 3.25 - —
Juniper tar oil, NF, dms. lb. .42 - .60
Juniper wood oil, tech., cns. lb. .38 - .55

K

Kaolin (see also Clay, China).
Kaolin, NF, powd., fib. dms. lb. .10 - .12
NF colloidal, 50-lb. bgs. lb. .15½- .17½
Karaya gum, No. 1, NF, powd., bls lb. .48 - .50
No. 2, powd., bbls. lb. .43 - .45
No. 3, powd., bbls. lb. .37 - .40
Koch acid, bbls., frt. alld., 100% basis lb. 1.00 - —
Kola nuts, bgs. lb. .11 - .13

L

L acid, bbls., works lb. 1.25 - —
Lacquer diluent, petroleum, 140°F. 200°F. b.r., tankcars, New Jersey and New York gal. .30 - —
Group 3 gal. .15125- —
Houston, Texas gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York gal. .20 - —
Group 3 gal. .14125- —
Houston, Texas gal. .16 - —
Lactic acid, food processing, 50%, dms., c.l., t.l., divd, N.Y., Phila lb. .1986- —
dms. 20 or more, same basis, lb. .2036- —
dms., 5 to 19, same basis lb. .2086- —
dms., 1 to 4, same basis lb. .2136- —
80%, c.l., dms., same basis lb. .3336- —
dms., 20 or more, same basis, lb. .3386- —
dms., 5 to 19, same basis lb. .3436- —
dms., 1 to 4, same basis lb. .3486- —

Lactic acid, plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls., 20 or more, works lb. .2790- —
bbls., 5 to 19, works lb. .2840- —
bbls., 1 to 4, works lb. .2890- —
Plastic grade, 80% bbls., c.l., works lb. .4623- —
bbls., 5 to 19, works lb. .4725- —
bbls., 1 to 4, works lb. .4775- —
Tech., 44%, bbls., c.l., works, 100 lbs. 12.45 - —
bbls., t.c.l., works 100 lbs. 12.95 - —
USP, 85%, cbys lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots, frt equald lb. .14 - —
bgs., 6,000-lb lots, frt equald lb. .14½- —
bgs., 2,000-lb lots frt equald lb. .14¾- —
bgs., 200-lb lots, frt equald lb. 15¼- —
Edible lactose in fib dms. ½c higher.
Lactose, ferment, grade, bgs., c.l., works lb. .08¾- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald lb. .21½- —
fib. dms., 2,000-lb lots frt. equald lb. .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower.
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt equald lb. .19 - .19¾
Lady's slipper root, bls. lb. 3.50 - —
Lamp black, bgs. c.l., works lb. .16 - .45
Lanolin, USP, anhyd. 400-lb dms., works lb. .24 - .26
USP, annyd., cosmetic, 400-lb. dms., works lb. .26 - .30
USP, hydrous, 400-lb dms., works, lb. .20 - —
Lard, cash, dms., Chicago lb. .08½- —
Lard oil (see Grease oil).
Larkspur seed, bgs. lb. .33 - —
Laurel leaf oil, dms., cns. lb 9.75 - 12.50
Laurent's acid, bbls lb. .87 - —
Lauric acid, pure, dms lb. .30¼- .32¾
bags lb. .28¾- .31¼
tanks lb. .27¾- —
Lauryl alcohol, bots lb. 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l., works lb. .65½- —
dms., t.t.l., works lb. .66 - —
Lavandin oil, 22-24%, dms. lb. 1.15 - —
Abrial, dms. lb. 1.20 - —
Lavender flowers, medium, bls lb. .55 - .60
Ord., bls. lb. .20 - .25
Select., bls lb. .90 1.00
Lavender flower oil, USP, French, 35-37% ester, cns lb. 2.25 - 4.00
40-42% ester, cns. lb. 3.50 - 3.65
Spike, Spanish, cns lb. 1.75 2.00
Lead acetate, NF, cryst., dms. lb. .37½- —
White, cryst., bbls. lb. .25½- —
gran., bbls. lb. .26½- —
powd., bbls lb. .26½- —
Lead arsenate, acid powder, dealers, 3-50-lb. bgs. or any quantity frt. alld on $150 or more lb. .30½- —
1-lb bgs., same basis lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt. point, frt. alld. lb. .15½- —
bbls., l.c.l., same basis lb. .16½- —
Lead carbonate (see Lead, white, basic carbonate).
Lead chloride, 400-lb. fib. dms. lb. .56 - —
Lead iodide, NF, V jars lb. 3.82 - —
Lead linoleate, fused, 24% liq. Pb, dms lb. .21¼- —
Lead metal, prime, pigs, New York lb. .10- —
St. Louis lb. .0980- —
Lead monosilicate, bgs., c.l., works, lb. .1240- —
bgs., l.c.l., same basis lb. .1340- —
Lead naphthenate, liq., 16% Pb., dms, divd lb. .19½- —
24% Pb, dms., divd lb. .24¼- —
Solid, 47% Pb., dms divd lb .31¾- —
Lead nitrate, tech., cryst., 400-lb. fib dms lb. .2675- —
Lead orthosilicate gel., 50-60% PbO_2, dms, works lb. .29¾ .34¼
Lead peroxide, tech powd., bbls lb. .45 .50
Lead phthalate dibasic, dms, works, lb. .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., cl, works lb. .13 - —
bbls., l.c.l., same basis lb. .14 - —
97% Pb_3O_4 or less, bbls., same basis, l.c.l., same basis lb. .1320- —
basis lb. .1420- —
98% Pb_3O_4, bls., c.l., same basis lb. .1335- —
bbls., l.c.l., same basis lb. .1435- —
Lead resinate precip, 23% Pb dms., lb. .49 - —
Lead salicylate, normal dms. works lb. .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., works lb. .19 - —
bgs., l.c.l., same basis lb. .20 - —

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PANCOAT TABLETS IN ONLY 4 HOURS!

Extensive research with the unique properties of Lactose U.S.P. Spray Dried has led to the discovery of a totally new pancoating concept. Tablets can now be pancoated, finished and waxed using existing equipment in as little as four hours with a maximum of four to six subcoating applications. This innovation in pancoating revolves around the rapid build-up of subcoatings and the elimination of grossing and color steps. The result is smooth-surfaced, spheroid-shaped tablets that have improved stability. And they dissolve quicker than conventional coated tablets. The free flowing property of Lactose U.S.P. Spray Dried assures uniform color intensity...fewer operator variables...and allows the pancoating process to be efficiently automated. Lactose U.S.P. Spray Dried, a Foremost exclusive, is available in a variety of colors, plus pure white. Strict chemical and bacteriological specifications and a rigid quality control program deliver highest quality.

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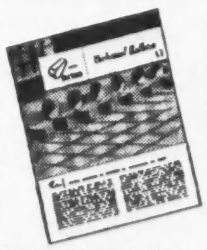

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Lead sulfate (see Lead blue basic sulfate and Lead white basic sulfate).
Lead tallate tq. 16% Pb. dms lb. .17¼ - —
24% Pb. dms lb. .21¼ - —
Solid 30% Pb. dms lb. .26¾ - —
Lead white, basic carbonate, bgs., c.l., frt. alld. lb. .16½ - —
bgs., l.c.l., same basis lb. .17½ - —
Basic silicate, bgs., c.l., same basis lb. .15½ - —
bgs., l.c.l., same basis lb. .16½ - —
Basic sulfate, bgs., c.l., same basis lb. .15½ - —
bgs., l.c.l., same basis lb. .16½ - —
Lecithin, edible tech. bleached, non-ret dms., c.l. works, lb. .14 - .15
non-ret. dms., l.c.l., same basis lb. .15 - .16
Lecethin, edible, tech., unbleached, non-ret. dms., c.l., same basis lb. .13 - .14
non-ret dms., l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 50 kilos, f.o.b works kilo. 14.20 - —
Lemon oil, USP, Calif., cns. dms. lb. 2.45 - 3.75
Messina, cns lb. 4.00 - 6.50
Lemongrass oil, cns., dms lb. 4.00 - —
dl-Leucine, dms., 1 kilo, works kilo. 50.00 - —
Licorice root gran., bls. lb 13 - —
Powd, bls. lb 15 - .16
Whole bls. lb 09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 - 3.50
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate)
Lilac oil lb 1,500.00
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs works, E ton. 14.25 - —
Chemical, hydrated, bgs., c.l., same basis ton. 17.25 - —
spray, bgs., c.l. same basis ton. 18.25 —
For New York delivery add $6.29 freight charge
Lime oil, dist., Mexican dms. lb. 5.25 - 6.00
West Indian, dms. lb. 5.25 - 6.00
Expressed, West Indian, dms lb 6.50 7.75
Lime salts (see Calcium)
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool ex bois de rose oil dms lb 2.45 4.25
Syn., 98-100%, dms., works lb. 3.20 —
Linalyl acetate ex bois de rose 90-92%, dms lb 2.65 4.50
96-98% dms lb 3.25 —
Syn., 98-100%, dms., works lb. 3.20 —
Lindane, 25% formulation, to distributors dms. frt alld. lb. 1.35 1.50
99%, tech. to formulators, 250-lb. dms., 5,000 lbs., dlvd lb 2.13 - —
100-lb dms, 5,000-lbs. dlvd lb 2.15 - —
250-lb dms, less than 5,000 lbs. dlvd lb 2.18 - —
100-lb dms, less than 5,000 lbs. dlvd lb 2.20 —
Linden flowers, with leaves bls lb 35 40
Without leaves bls. lb 42 45
Linseed meal, expeller, 32%, bulk, Minneapolis, mills ton. 63.50 - —
Extracted, 34%, bulk same basis ton. 61.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1880 - —
dms, New York, l.c.l. lb. .2080 - —
tanks, f.o.b. Minneapolis lb. .1520 - —
tanks, New York lb. .1628 - —
tankwagon, New York lb. .1653 - —
Boiled linseed oil, 006c per lb higher.
Linseed oil acid, dist., dms. lb. .22½ - .25
tanks lb. .20 - —
water-white, dms. lb. .27¼ - .29¾
tanks lb. .24¾ - —
Litharge, coml., powd., bbls., c.l., works lb. .12½ - —
bbls., l.c.l., same basis lb. .13½ - —
Lithium aluminum, hydride, lump, dms., works lb. 33.00 - 39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., ngs., works, frt equald lb 2.60 —
Lithium carbonate, NF dms ton lots lb. .58 - —
dms., 1,999 lbs. or less lb .64 - —
Tech., dms. ton lots lb. .57 - —
dms., 1,999 lbs. or less lb. .63 - —
Lithium chloride CP anhyd. dms., ton lots lb. 1.23½ - —
Tech. anhyd. dms. c.l. t.l., dlvd. or works frt alld lb .87 —
dms. l.c.l. same basis lb .88 .92
Lithium citrate NF dms. ton lots, lb. 1.50 —
Lithium fluoride dms., 20,000-lb. lots, dlvd lb 1.75 - —
bbls., ton lots and more, dlvd lb 1.85 - —
bbls., less ton lots, dlvd lb 1.90 - —
Lithium hydride powd. dms., 500-lbs lots or more works, lb 9.50 - —
Lithium hydroxide, monohydrate dms., c.l., t.l., frt. alld lb. .54 - —
dms., l.c.l., frt. alld. lb. .58 - —
Lithium manganite dms. works lb 95 1.05
Lithium nitrate tech dms. 100-lb lots lb 1.15 1.25
Lithium salicylate dms lb 1.60 1.70
Lithium silicate dms. works lb 1.10 1.20
Lithium stearate dms. c.l. works lb. 47½ —
dms. ton lots works lb. 48½ —
dms. less-ton lots works lb 53½ —
Lithium sulfate dms 100-lb lots. lb 1.15 1.25
Lithium titanate dms. works lb 1.15 1.25
Lithol red toner, barium, bbls., works lb 1.03 —
Lithol red toner, pure, bbls., works. lb. 1.65 - —
Resinated, bbls., works lb 1.47 —
Lithopone, ord., bgs., c.l., dlvd. E. lb 08⅜ - —
bgs. l.c.l. dlvd & lb 09⅛ - —
Titanated (high-strength), bgs., c.l. dlvd lb. 11 —
bgs. l.c.l. dlvd lb 12 —
Lobelia herb, bls lb 80 - —
Lobeline sulfate bots. 50-oz lots, works oz 30.00 —
Locust bean gum powd. bgs lb 35 40
Lycopodium, cs. lb. 2.50 - 3.00
l-Lysine monohydrochloride, 25-lb dms lb. 4.50 —

M

Mace, Siauw, No. 1, bls lb. 1.25 - —
No. 2, whole, bls lb. 1.15 - —
siftings, bls. lb. 1.10 - —
Mace oil, dist., cns., dms. lb. 8.00 - 10.00
Magnesia, calcined, tech. bgs., clas., frt equald lb. .25¾ .26½
Tech. syn., rubber grade, light, bgs., c.l., frt. equald lb .28¾ .30
Magnesia, calcined, tech., syn., rubber grade, extra light, bgs., c.l., frt. equald lb. .28 - —
bgs., l.c.l., frt equald lb .28¾ - —
Above prices are quoted f.o.b works, freight equald., with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l., f.o.b. Lunning, Nev ton. 39.50 - —
91%, bgs., c.l., same basis ton. 49.50 - —
95%, bgs., c.l. same basis ton. 59.00 - —
USP, light, bgs. lb. .36½ - .37½
USP, heavy, bgs lb. .36½ - .37½
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton. 86.25 - —
Deadburnt, standard grain, bulk, c.l., Chawelah, Wash. ton. 46.00 - —
Magnesium bromide, 50-lb. dm., f.o.b. works lb. 1.15 - —
Magnesium carbonate, tech., bgs., c.l., frt. equald lb. .11 - —
bgs., t.l., frt. equald lb. .11½ - —
bgs., l.c.l. frt equald lb. .13½ - .14
USP, bgs., c.l., frt. equald lb. .13½ - —
bgs. t.l., frt equald lb. .14 - —
bgs., l.c.l. frt equald lb 15 16
Above prices are quoted f.o.b. works, freight equald., with Metropolitan New York and competitive producing points.
Magnesium chloride, anhyd., 92%, flake or pebble, drums., c.l. works lb. .12¾ - —
dms. l.c.l., works lb. 14 .15
hydrous, 99%, flake, bgs., c.l., works ton. 60.00 —
bgs., l.c.l., works ton. 75.00 - 100.00
Magnesium gluconate 100-lb dm. f.o.b works E lb. 1.42 —
Magnesium hydroxide, NF powd., dms., 500-lbs or more, f.o.b. works lb. .24½ - 25½
Magnesium lauryl sulfate dms., c.l., frt alld lb. .22½ - —
dms., t.l., frt alld lb. .23½ - —
tanks, frt alld. lb. .21½ - —
Magnesium metal, 99.8%, ingots, 10,000-lb lots or more, works lb .36 - —
pigs., 10,000-lb lots or more, works lb. .35¼ - —
sticks, cs., works, same basis lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .29 - —
Magnesium oxide (see Magnesia calcined).
Magnesium phosphate, trihasic, NF, bbls lb. 75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb .10½ - .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs 2.15 —
bgs, l.c.l., works 100 lbs 2.90 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
bgs. l.c.l., 5,000 lbs., 1 with drawal 100 lbs 3.10 - —
bgs., smaller lots 100 lbs 3.35 - —
Magnesium trisilicate, USP, powd., fib. dms., 5,000-lb. lots lb. .38 - —
fib dms. 1,000-lb lots lb. 40 - —
fib dms. 100-lb lots lb. 45 - —
USP, micronized powd., dms., 500-lb. lots lb. .80 - —
Malachite green, straight, PTA, bbls., works lb 5.30 - —
Malathion, dms., c.l., works lb. .89 —
dms., l.c.l., works lb. .92 1.01
Maleic acid, cryst, powd. dms lb. .37¼ —
Maleic anhydride, dms., c.l., frt. equald lb .24½ - —
dms., l.c.l., frt. equald lb. .24½ - —
tanks, frt. equald lb. .21½ - —
Maleic anhydride in bags ½c per lb less
Malic acid, tech., dms lb 50 —
Mandelic acid, NF, dms., 1,000-lb lots lb 2.35 —
dms., smaller lots lb 2.40 2.50
Mandrake root, bls. lb. .42 - .44
Manganese acetate, dms., dlvd lb. .35 —
Manganese borate, tech., fib dms. lb. .23½ - —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb lots and more, works lb. .11 - .16
Manganese chloride, CP, anhyd., dms., 20,000-lb lots, works lb. .21¾ - —
smaller lots, works lb. .23½ - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, burlap paper lined bgs., gross for net works ton. 148.00 - —
40,000 to 99,999-lb lots, paper bgs., same basis ton. 144.50 —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb lots, dms same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb lots $3 per ton higher
Manganese gluconate dms lb 1.84 - —
Manganese hydrate dms. dlvd lb. .35 - —
Manganese hypophospnite NF dms. lb 3.52 —
Manganese linoleate, liq. 6% Mn, dms lb. .26½ - —
Solid, precip. 8.2% Mn, bbls lb. 41¼ —
Manganese metal, electrolytic, dms., c.l., dlvd E lb. .34½ - —
dms., ton lots dlvd E lb. .37 - —
dms., smaller lots, dlvd E lb. .39 —
Manganese naphthenate, liq. 6% Mn, dms., frt alld lb. .29¾ - —
Manganese resinate, fused, 8½% Mn, dms lb 29¼ - —
Precip 6½ 7% Mn, dms lb. 42 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd, S. E. ton. 95.00 - —
bgs., l.c.l., dlvd, S. E ton. 102.00 - —
75% $MnSo_4$, 30-tons same basis 85.00 - —
Manganese tallate, 6% dms lb. .26½ - —
Mannitol, com'l, fib dms, ton lots, works lb. .60 —
fib dms, to ton lots, works lb. .62 —
fib dms, single dm, works lb. .65 —
Marine pitch, dms lb. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole)
Melamine, bgs., c.l., works lb. .26½ - —
bgs, l.c.l., works lb. .28 - —
Menadion, USP, bots. gram. .044 05
Menhaden oil, crude, tanks, works, Atl. & Gulf ports lb. .05½ - —
Menthol, nat, USP Brazilian, large crystals, cs lb. 6.75 - 7.00
Nat., USP Brazilian, regular crystals, cs lb. 6.65 - 6.90
Japanese, cs. lb. 10.25 - 10.50
Syn., USP, racemic, 25-lb. lots lb. 4.25 —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs., fib. dms., less ton lots, same basis lb. .46 - —
Mercaptobenzothiazyl disulfide, bgs., fib dms., ton lots, works, frt. alld lb. .54 - —
bgs, fib dms. less ton lots, same basis lb. .56 - —
Mercurie chloride, NF, cryst., dms., 100 lbs., f.o.b works lb 4.03 - —
USP, gran. or powd., 50-lb. dm., 100 lbs. f.o.b works lb 3.78 - —
Mercurie cyanide, NF VIII powd., fib dms lb. 5.84 - —
Mercurie iodide, red, NF, 100-lb. dm. f.o.b. works lb. 6.97 - —
Mercurie oxide, red, NF IX, 50-lb. dm. 100 lbs. f.o.b works, lb. 4.72 - —
tech. 50-lb dm. 100 lbs., same basis lb 4.52 - —
yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 4.89 - —
tech., dms., 100 lbs. lb. 4.35 - —
25-lb. fib. dm. lb. 4.38 - —
Mercurous chloride (see Calomel).
Mercury, ammoniated (see White precipitate USP XV)
Mercury metal, 76 lbs. per flask, net-flask. 188.00 - 190.00
Mesityl oxide dms., c.l., dlvd lb .15 —
dms., l.c.l., dlvd. lb .16½ - —
tanks, dlvd lb .12½ - —
Meta aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75
Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine)
Metatolylenediamine (see 2,4-Tolylenediamine).
Methacrylic acid glacial 99% dms., truckloads frt equald lb. .42½ - —
dms. smaller lots, frt equald. lb. .43 - .75
tanks works, frt. equald lb. .40 - —
Methanol, nat, denaturing grade, tanks frt alld gal. .85 - —
Syn. zone 1, dms., c.l., or t.l. min dlvd gal. .51½ - —
dms. t.c.l. dlvd gal. .61½ - —
Syn., tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal min., dlvd gal. .30 - —
tankwagon, 4,000 gal min., f.o.b terminal gal. .29 - —
Syn., zone 2, dms., c.l., t.l., min., frt. alld. or dlvd. gal. .55½ - —
dms., t.c.l. works gal. .65½ - —
Methanol, syn, Zone 2, tankwagon, 2,000-4,000 gal. lots, min., dlvd. Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz. Calif., Idaho Nev. Ore., Utah and Wash
Methapyrilene fumarate, 100-999 lbs., dms., f.o.b works, frt. equald lb 21.75 - —
Methapyrilene hydrochloride 100-999 lbs., dms. f.o.b. works, frt equald lb. 27.25 - —
Methenamine (see Hexamethylene-tetramine).
Methionine hydroxyanalogue (calcium salt) 90% min., dms. t.l. frt alld lb 1.10 - —
dms., t.l., same basis lb 1.16 - —
dl-Methionine, fib dms., frt alld., 50-lb or more lb 3.50 - —
Feed grade, 98% fib dms. same basis lb. 1.43 - —
Methoxychlor 50% wettable powder dealers dms cs lb. .66 - —
Methyl abietate, non-ret dms., c.l., dlvd zone 1 lb. .21½ - —
non-ret dms., l.c.l. same basis lb. .22 .22½
Methyl abietate, hydrogenated, non-ret dms., c.l. dlvd zone 1 lb. .23½ - —
non-ret dms. l.c.l. same basis. lb 24 24½
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill. Wis. St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla. S. C. and Tenn
Methyl acetone, nat. dms., l.c.l., E of Miss. frt alld gal. .62½ - —
Syn., dms., c.l., frt. alld. E gal. .60½ - —
dms., l.c.l., frt. alld E gal. 70½ - —
tanks, frt. alld. E gal. .44½ - —
Synthetic methyl acetone E territory comprises all states East of and including Colo., Mont. N. Mex. and Wyo. West territory is made up of all states west of those four.
Methyl acrylate, dms., c.l., t.l., dlvd. lb. .35¼ - —
dms., t.t.l., dlvd lb. .36¼ - —
tanks, dlvd. lb. .32¼ - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd E lb. .17 - —
dms. t.c.l., dlvd E. lb. .18½ - —
tanks, dlvd E. lb. .14½ - —
Methyl amyl alcohol, dms., c.l., dlvd, lb. .17 - —
dms., t.c.l., dlvd. lb. .18½ - —
tanks, dlvd. lb. .14½ - —
Methyl amyl ketone, dms., c.l., t.l., f.o.b works lb. 1.99¼ - —
dms., t.c.l., same basis lb. 2.00 - —
N-Methylaniline, tech., tanks, frt. alld lb. .60 - —
Methylanthranilate, cns. lb. 2.20 - 2.70
Methyl benzoate, cns. dms lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt alld lb. .62 - .72
on 100 lbs lb. .73 - .79
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb. bgs., c.l., works lb. .82 - —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .89 - —
50-lb bgs., smaller lots, frt. alld. on 100 lbs lb. 1.05 - —
Methyl cellulose, standard vis. (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb lots and more, same basis lb. .76 - —
50-lb bgs., smaller lots, frt. alld. lb. —
Methyl chloride, indust. cyls., frt. equald lb. .22¼ - —
tanks, multi-unit, same basis, lb. .16¼ - —
tanks, single unit, same basis, lb. .12¾ - —
Methyl chloride, refrigerator mfgs., cyls., dlvd lb. .48¾ - —
Other consumers or service men, cyls., dlvd lb. 67¾ - —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns lb. 2.05 - 2.20
Metnyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½ - —
tanks, dlvd. lb. .12½ - —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .43 - —
dms., t.c.l., works lb. .45¾ - —
tanks, works lb. .43 - —
Methyl formate, refd., dms lb. .35 - .40
Tech., non-ret. dms., any quantity, works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .26 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works, lb. .27 - —
100-lb. multiwall paper bgs., l.t.l., works lb. .28 - —
Methyl heptin carbonate, bots. lb. 27.25 - 29.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isoamyl ketone, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., dlvd. lb. .20½ - —
tanks, dlvd. lb. .17½ - —
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd lb. .18½ - —
tanks, dlvd lb. .14½ - —
Methyl methacrylate, dms., c.l., t.l., frt equald, with Belle, W Va lb. .31 - —
dms., smaller lots, same basis lb. .31¼ - —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb. 2.45 - 4.30
Methyl parahydroxybenzoate (see p-Hydroxybenzoate)
Methyl parathion, tech., 80%, dms., frt. alld. E lb. .84 - —
Methyl parathion prices 2c. per lb. higher in West
Methyl roseaniline chloride, NF., 5-lb. fib dms lb. 6.90 - —
Methyl salicylate, dms., t.l., frt, alld lb. .60¼ - —
dms., t.c.l., same basis lb. .62½ - .67½
Methyl testosterone, USP, 100-gram bots gram. No Prices.
2-Methyl-5-vinyl pyridine, 40-dm. lots or more, f.o.b. works lb. 1.32 - —
5-39 dm lots, same basis lb. 1.37 - —
tanks, same basis lb. 1.27 - —
Methyl violet toner, molybdated, PMA bbls., dlvd. E of Rockies lb. 2.95 - —
Tungstated, PTMA, bbls., same basis lb 4.35 - —
Methyl violet prices 1c. higher W. of Rockies
Methylene blue, NF, crystals, 100-lbs., frt. equald lb. 4.10 - —
Methylene chloride, tech., straight or assorted, dms. c.l. or t.l., dlvd lb. .12½ - —
dms. t.c.l. t.t.l. dlvd lb. .15¾ - —
tanks, 4,000-gal. min., dlvd lb. .11¼ - —
b-Methylnaphthalene, 32°C., m.p., dms. works lb .90 —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methyl-pyrazolone-5)
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04 —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt alld E lb. .06½ - —
bgs. t.c.l., ex-whse lb. .07¼ - —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld E. lb. .08¼ - —
bgs. t.c.l., ex-whse or freight alld. E lb. .09 - —
wet-grd., rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
bgs. t.c.l., ex-whse, or frt. alld. E lb. .08¾ - —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾ - —
bgs. ex-whse or frt. alld E. lb. .09 - —
Mica, white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. 08¼ - —
Mica, wet-grd. W. of Miss ½c higher; W. of Rockies 1c higher
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs. works lb. .0160 - .0673
Mineral oil, white tech., 50-65 vis., non-ret dms., c.l., f.o.b. refy gal. .70 - —
non-ret. dms., t.c.l., same basis gal. .75 - —
tankcars, refy. gal. .54 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .70½ - —
non-ret. dms t.c.l same basis gal. .75½ - —
tankcars, refy. gal. .54½ - —
NF, 80-90% vis., non-ret. dms., c.l., same basis gal. .71 - —
non-ret. dms., t.c.l., same basis gal. .76 - —
tankcars, refy. gal. .55 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy. gal. .61 - —
Mineral oil, white, NF, 145-155 vis., non-ret. dms., c.l., same basis gal. .83 - —
non-ret. dms., t.c.l., same basis gal. .88 - —
tankcars, refy. gal. .67 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .85 - —
non-ret. dms., t.c.l., same basis gal. .90 - —
tankcars, same basis gal. .69 - —
200-210 vis., non-ret. dms., c.l., f.o.b. refy gal. .875 - .90
non-ret. dms., t.c.l., same basis gal. .925 - —
tankcars, refy. gal. .69 - .715
340-350 vis., non-ret. dms., c.l., f.o.b. refy gal. .92½ - —
non-ret. dms., t.c.l. gal. .97½ - —
tankcars, refy. gal. 76½ - —
(For dlvd. N.Y. prices add 2c. for c.l. and 3c. for t.c.l.).
Mineral orange, American, bbls., c.l., works lb. .15¼ - —
bbls., l.c.l., same basis lb. .16¼ - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875 - —
Houston, Texas gal. .145 - —
140 F. flash, New York, New Jersey at terminal gal. .205 - —
Houston, Texas gal. .17 - —
Mink oil, dms lb. 1.75 - —
Mirbane oil (see Nitrobenzene).
MNPT maroon toner, bgs., c.l., works in 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .12 - .12½
tanks, New York gal. .15½ - .16

Molybdated orange, bbls.	lb.	.49	—
Molybdenum metal, powd., 80 or 200 mesh, ctns., works	kilo.	7.84	—
325 mesh, ctns., works	kilo.	9.13	—
Molybdenum trioxide, purif., dms., works	lb.	1.25	—
Tech., chemical, dms., works, basis Mo content	lb.	1.61	—
Tech., metallurgical, dms., works, basis Mo. content	lb.	1.60	—
Molybdic acid, 84%, dms., works	lb.	1.15	1.25
Monoallylamine, dms., c.l., dlvd.	lb.	.965	—
dms., c.l., dlvd.	lb.	.995	—
tanks, dlvd.	lb.	.96	—
Monobutylamine, dms., c.l., dlvd. E. of Rockies	lb.	.57½	—
dms., t.c.l., same basis	lb.	.59	—
tanks, same basis	lb.	.55	—
Mono-tert-butyl-m-cresol, dms., c.l., works	lb.	.55	—
dms., t.c.l., works	lb.	.56	—
tanks, works	lb.	.54	—
Monochloracetic acid, purif. (see Chloroacetic acid, mono).			
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E	lb.	.10½	—
dms., t.c.l., same basis	lb.	.11½	—
tanks, same basis	lb.	.08¾	—
Monochlorobenzene prices in the West 1¾c. higher.			
Monoethanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoethylalphanaphthylamine (see n-Ethyl-a-naphthylamine).			
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E, 100% basis	lb.	.38½	—
dms., t.c.l., dlvd. E., 100% basis	lb.	.40	—
tanks, dlvd. E., 100% basis	lb.	.35	—
Monoethylaniline (see N-Ethylaniline).			
Monoethylorthotoluidine (see N-Ethyl-o-toluidine)			
Monoisopropanolamine, dms., c.l., dlvd. E	lb.	.27½	—
dms., t.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Monoisopropylamine, anhyd., dms., c.l., dlvd	lb.	.33½	—
dms., t.c.l., same basis	lb.	.35	—
tanks, same basis	lb.	.31	—
Monomethylamine, anhyd., cyls., t.c.l., frt. equald., 100% basis	lb.	.30	—
tanks, 100% basis	lb.	.26	—
30-35% soln., dms., c.l., frt. equald. 100% basis	lb.	.36	—
30-35% soln., dms., t.c.l. frt. equald, 100% basis	lb.	.36½	—
tanks, frt equald., 100% basis,	lb.	.26	—
40% soln. dms. frt. equald., 100% basis	lb.	.33	—
dms., t.c.l., frt. equald., 100% basis	lb.	.33½	—
tanks, frt. equald, 100% basis	lb.	.26	—
Monopentaerythritol, tech. bgs., c.l., dlvd	lb.	.29	—
bgs., t.c.l.	lb.	.30	—
Monopotassium glutamate, dms., 1,000-lb lots, frt alld	lb.	3.05	—
dms 100-lb lots, same basis	lb.	3.25	—
Monosodium glutamate, dms., dlvd.	lb.	1.02	1.07
Monosodium phosphate (see sodium phosphate monobasic)			
Montan wax, Calif., refd., bgs	lb.	.29	.30
imp., crude, Bohemian, bgs	lb.	.25	.26
German, bgs.	lb.	.25	.26
Morphine, cns., 100-oz., f.o.b. works	oz.	12.35	—
Morphine hydrobromide, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine hydrochloride, NF, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morphine sulfate, USP, cns., 100-oz., f.o.b. works	oz.	9.90	—
Morpholine, dms., c.l., dlvd. E	lb.	.55¼	—
dms., t.c.l., dlvd. E	lb.	.56¾	—
tanks, dlvd E	lb.	.52¾	—
Muriatic acid (see Hydrochloric acid).			
Musk syn. ambrette, fib. dms., 100-lb lots	lb.	4.40	4.90
cns., 25-lb lots	lb.	4.50	5.00
Ketone fib. dms., 100-lb. lots	lb.	4.60	5.10
cns., 25-lb. lots	lb.	4.70	5.20
Xylol, fib. dms., 100-lb lots	lb.	1.26	—
cns., 25-lb lots	lb.	1.40	—
Mustard seed Danish, yellow, bgs.	lb.	.11	—
Montana, yellow, bgs	lb.	.10½	—
Oriental, bgs	lb.	.09	—
Mustard, oil, syn., bots.	lb.	1.60	1.85
Myristic acid, bgs	lb.	.23¼	.25¾
tanks	lb.	.22¼	—
Myrrh gum, cs.	lb.	.65	.75

N

Naphtha, high solvency (see Solvent naphtha, petroleum).			
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).			
Naphtha, VM&P, petroleum, tank-cars, New Jersey and New York	gal.	.19	—
Group 3	gal.	.13875	—
Houston, Texas	gal.	.155	—
Naphthalene, crude, dom., 78°, tanks, f.o.b., frt. equald	lb.	.06¼	.06⅛
Reid indust., chipped, crushed, bgs., frt. equald	lb.	.14½	—
tanks, same basis	lb.	.11¾	—
Naphthalene, refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.15½	—
cs. 50 lbs. c.l., same basis.	lb.	.15¾	—
1-lb pkgs. c.l., same basis.	lb.	.18½	—
a-Naphthol, dms., frt. alld	lb.	1.02	—
b-Naphthol, tech., flake bbls., c.l., works	lb.	.34	—
bbls., t.c.l., works	lb.	.36	—
Naphthol ITR red toner, bbls., works	lb	5.00	—
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid)			
1-Naphthol-4 sulfonic acid (see Neville and Winther's acid)			
1-Naphthol-5-sulfonic acid (see L acid)			
1-Naphthol-5-sulfonic 8-amino acid (see S acid)			
2-Naphthol-6,8-disulfonic acid (see Gamma acid).			
Naphthol sulfonic mixed acid (see Cleve's acid).			
a-Naphthylamine, dms., frt. alld	lb.	.83	—
b-Naphthylamine tech. flake, bbls., works	lb.	1.60	—
1-Naphthylamine-5-sulfonic acid (see Laurent's acid)			
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid).			
2-Naphthylamine-1-sulfonic acid (see Tobias acid).			
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).			
2-Naphthylamine-7-sulfonic acid (see F acid)			
Naringin, fib. dms.	lb.	8.50	—
Neatsfoot oil, 15° cold test, dms.	lb.	.29	Nom.
20° cold test, dms.	lb.	.28	Nom.
30° cold test, dms.	lb.	.27	Nom.
Neocinchophen, USP, dms., frt. adjusted	lb.	7.00	8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity, gram.		.18	—
fib. dms., 100-999-gram lots, basis activity gram.		.25	—
Tech., fib. dms.	gram.	.13½	—
Neopentylglycol, dms., c.l., dlvd	lb.	.32	—
dms., t.c.l., same basis	lb.	.33	—
Nerol, dms.	lb.	4.75	—
Neroli oil, NF, French, bots.	lb.	425.00	575.00
Tunisian, bots.	lb.	400.00	—
Nerolin, cns.	lb.	2.45	2.85
Neville and Winther's acid, dms., frt. alld	lb.	1.50	—
Niacinamide (see Nicotinamide).			
Nickel acetate, bbls., dlvd.	lb.	.72	.79
Nickel carbonate, bbls., dlvd.	lb.	.83	.90
Nickel chloride, bbls., dlvd.	lb.	.39½	.47½
Nickel formate, bbls., ton lots, frt. alld	lb.	.78	.79
Nickel metal, electro cathodes, cs., works	lb.	.81¼	—
Nickel nitrate, dms., frt. alld	lb.	.34½	.36½
Nickel oxide, black, bbls.	lb.	.92	—
Green, bbls.	lb.	.91	—
Nickel sulfate, bgs., c.l., dlvd	lb.	.30	—
bgs., t.c.l., dlvd.	lb.	.30½	.38
Nicotinamide, USP, 50-kilo, dms., frt. equald	kilo.	5.75	—
dms., smaller lots, same basis.	kilo.	5.85	6.05
Nicotinamide hydrochloride, 50-kilo dms., dlvd	kilo.	6.50	7.50
Nicotine sulfate, 40%, dealers, 50-lb. dms. frt. alld	lb.	1.20	—
40%, manufacturers, 500-lb. dms., frt. alld	lb.	1.05	—
Nicotinic amide, USP (see Nicotinamide).			
Niger seed, bgs.	lb.	.10¼	—
Nikethamide, cbys.	lb.	5.00	—

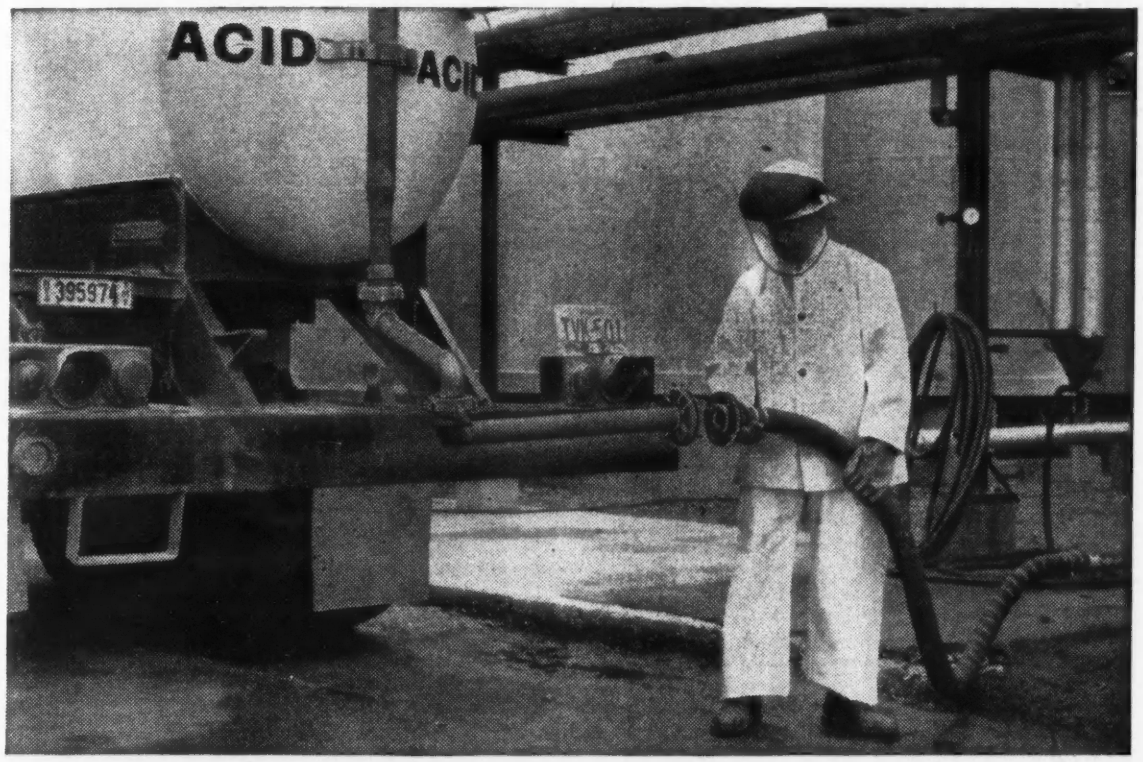
Nitric acid, 36° Be., cbys., c.l., works E	100 lbs.	5.75	—
cbys., t.c.l., works E	100 lbs.	6.05	6.85
38° Be., cbys. c.l., works E.	100 lbs.	6.25	—
cbys., t.c.l., works E	100 lbs.	6.55	7.35
40° Be., cbys., c.l., works E	100 lbs.	6.75	—
cbys., t.c.l., works E	100 lbs.	7.05	7.85
Nitric acid, 42° Be., cbys., c.l., works E	100 lbs.	7.25	—
cbys., t.c.l., works E	100 lbs.	7.55	8.35
58.5 to 68%, HNO_3, tanks, works, 100% basis	100 lbs.	3.90	—
94½ to 95½% HNO_3, tanks, works, 100% basis	100 lbs.	4.90	—
Nitric acid, CP, NF consumer, cbys., extra, c.l., works	lb.	.18½	—
cbys., extra, t.c.l. works.	lb.	.20	—
5-pint bots., extra, cs., c.l., same basis	lb.	.22½	—
5-pint bots. extra, cs., t.c.l., same basis	lb.	.24	.25
dms., frt alld	lb.	.99	—
4-Nitro-2-aminophenol, tech., paste, dms., t.c.l., works	lb.	.64	—
m-Nitroaniline, cryst., dms., frt. alld	lb.	1.15	—
Paste, dms., frt. alld., 100% basis.		1.10	—
o-Nitroaniline, flaked, dms., t.l., frt. alld	lb.	.49	—
dms., t.t.l., frt. alld	lb.	.51	—
o-Nitroaniline orange toner, kgs.	lb.	1.50	—

p-Nitroaniline c.l., t.l., dms., 20,000 lb min. dlvd	lb	44½	—
dms. t.c.l., same basis	lb	46½	—
o-Nitroanisole tech tanks frt alld	lb	.36	—
p-Nitroanisole, tech. solid, dms., frt alld	lb	.72	—
Nitrobenzene dbl dist dms. c.l., frt alld	lb	.13	—
dms., t.c.l., frt. alld.	lb	.14	—
tanks, frt. alld	lb	.12	—
p-Nitrobenzoic acid, dms., c.l., t.l., works	lb.	.53	—
dms., t.c.l., works	lb	.54	—
Nitrocellulose, ester-soluble, 30-35 cps., ¼ ½, ¾, 5-6, 15-20, 30-40, 60-80 125-175 seconds, bbls., c.l., works	lb.	.39½	—
bbls., t.c.l., same basis	lb.	.42½	—
18-25 cps., bbls. c.l. same basis.	lb.	.41½	—
bbls., t.c.l., same basis	lb.	.44½	—
250-400, 600-1,000 seconds, bbls., t.c.l., same basis	lb.	.44½	.47½
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls., c.l., same basis	lb.	.44	—
bbls., t.c.l., same basis	lb.	.47	—
5-6 cps., 40-60 seconds, bbls., c.l., same basis	lb.	.43	—
bbls., t.c.l., same basis	lb.	.46	—

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

YOUR CLOSE CONNECTION for Mineral Acids

...GENERAL CHEMICAL!



Here's Why!

All across the country, General Chemical's mineral acid production *and* stock points are just around the corner from you.

General Chemical mineral acids are produced at more than 20 locations and are stocked at an additional 17 strategic points in major consuming centers. This "broad-network" distribution system is always *your* insurance of prompt service . . . even emergency demands can be handled in stride.

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Diamond: 66° Baumé
Reagent, ACS

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18°, 20° and 22° Baumé, Standard Diamond, Crystal and Reagent Grades

PHOSPHORIC ACID
Wet Process, 75%, Com'l and Fertilizer Grades
Food Grade, 75%
N.F., 85%

NITRIC ACID
Diamond: 36°, 38°, 40°, and 42° Baumé
Strong Nitric Acid, 95% and fuming grades
Photo-Engravers' Grade
Reagent, ACS

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40 Rector Street, New York 6, N. Y.
In Canada, Allied Chemical Canada, Limited

o-Nitrochlorobenzene—Paraldehyde

o-Nitrochlorobenzene, dms, c.l., frt. alld lb. .15 • —
dms., l.c.l., same basis lb. .16 • —
tanks, same basis lb. .13 • —
p-Nitrochlorobenzene, dms. lb. .26 • .27
2-Nitro-p-cresol, tech., dms., t.l lb. .71 • —
dms., l.t.l. lb. .73 • —
Nitroethane, dms., c.l., dlvd. E lb. .28½- —
dms., l.c.l., dlvd. E lb. .30 • —
tanks, dlvd E lb. .26 • —
Nitroethane prices West of Rockies are 1c. higher.
Nitrogen solutions, direct application, tanks, f.o.b. works unit-ton. 1.64 • —
Manufacturing type, same basis, unit-ton. 1.32 • —
Nitrogen tetroxide, indust., tankcars, f.o.b. Hopewell, Va lb. .065 • —
Cyls., t.l., min. 5 tons, same basis lb. .07½- —
Cyls., l.c.l., l.t.l., same basis lb. .15 • —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 - 5.00
Nitrogenous sewage sludge, bulk, f.o.b. Chicago works, unit-ton. 3.35 • —
(The foregoing price is per unit NH_3, plus 50c. per unit a.p.a., bulk, f.o.b. producers' works, Chicago.)
Nitromethane, dms., t.l., dlvd. E lb. .26 • —
dms., l.t.l., dlvd. E lb. .27½- —
Nitromethane prices West of Rockies are 1c higher.

a-Nitronaphthalene, bbls., frt. alld. lb. .31 • —
o-Nitrophenol, dms., works, frt. equald lb. .94 • —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 • —
dms., l.c.l., frt. alld lb. .47 • —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .28½- —
dms., l.c.l., same basis lb. .30 • —
tanks, same basis lb. .26 • —
1-Nitropropane prices West of Rockies are 1c. per lb higher.
2-Nitropropane, dms., c.l., frt. alld. E of Rockies lb. .18½- —
dms., l.c.l., same basis lb. .20 • —
tanks, same basis lb. .16 • —
m-Nitrotoluene, tech., dms., frt. alld. lb. .50 • —
o-Nitrotoluene, dms., c.l., frt. alld lb .15 • —
dms., l.c.l., frt alld. lb. 16 • —
tanks, frt. alld. lb. .13 • —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., l.c.l., works lb. .28 • —
flake, dms., c.l., t.l., works lb. .27½- —
dms., l.c.l., works lb. .28 • —
m-Nitro-p-toluidine, dms. lb. 1.25 • —
Nonylphenol, dms., c.l, frt. alld. lb. .22½- —
dms., l.c.l., frt. alld lb. .23½- —
tanks, frt. alld lb. .20 • —
Nonylphenol prices on shipments to Western States are 2c. higher.

Noscapine, cns. oz. 8.00 • —
Nutmegs, East Indian, whole, bgs. lb. 1.00 • —
West Indian, bgs. lb. .85 • —
Nutmeg oil, USP, dist., East indian, cns. lb. 8.00 -12.00
West Indian, cns. lb. 9.00 -12.00
Nux vomica, bls. lb. .20 • —
Powd., bbls., bxs. lb. .20 • .23

O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .44 • .47
Octane, indust., tanks, Bayonne, N.J. gal. .20 • —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .41½- —
dms., l.c.l., dlvd. Zone 1 lb. .43½- .44½
tanks, dlvd. Zone 1 lb. .37½- —
Octyl alcohol, perfumers grade, bots, lb. 1.60 - 3.25
Octyl alcohol, tech. (see 1-Octanol, tech).
n-Octyl-decyl alcohol blend, tanks, dlvd lb. .19 • —
n-Octyl n-decyl phthalate, dms., c.l., frt. alld. E. of Rockies lb. .29½- —
dms., l.c.l., same basis lb. .31 • —
tanktrucks, 1,000-1,999 gals., same basis lb. .27½- —
tanktrucks, 2,000 gals., same basis lb. .27 • —
tert-Octylamine, dms., c.l., t.l., f.o.b. works lb. .54½- —
dms. l.c.l. same basis lb. .55 • —
Octylphenol, bgs., c.l., works lb. .22½- —
bgs., l.c.l., works lb. .23 • —
tanks, works lb. .21½- —
Octylphenol in dms., 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liquid, dms lb. .15¾- .16
tanks lb. .14¼- —
Oleic acid, dbl.-dist. (white), dms. lb. .18½- .21
tanks lb. .16 • —
S. D., dms. lb. .17½- .20
tanks lb. .15 • —
Oleum (see Sulfuric acid, fuming).
Olibanum gum, siftings, cs lb. .15 • .20
Tears, cs. lb. .22 • .30
Olibanum oil, bots lb. 5.00 - 7.65
Extra fine, bots lb. 8.00 - 9.50
Olive oil, edible, dms., spot, ex whse. gal. 2.30 - 2.40
Olivine, crude, works ton.12.00 • —
20 mesh, works ton.15.00 • —
100 mesh works ton.20.00 • —
Opium, USP, cns., 25-lbs., f.o.b. works oz.19.20 • —
gran., cns., 50 lbs., same basis. oz.21.65 • —
powd., cns., 50 lbs., same basis. oz.21.65 • —
Orange oil, expressed, USP, Calif., cns., dms lb. .70 • .90
Calif., sweet., cns., dms lb. .60 • —
Florida, cns., dms lb. .40 • .45
Messina, cns. lb. 3.25 - 5.00
West Indian, bitter, cns., dms lb. 2.50 - 3.50
Orange peel, bitter, Haitian, bls lb. .18 • .20
Sweet lb. .28 • .30

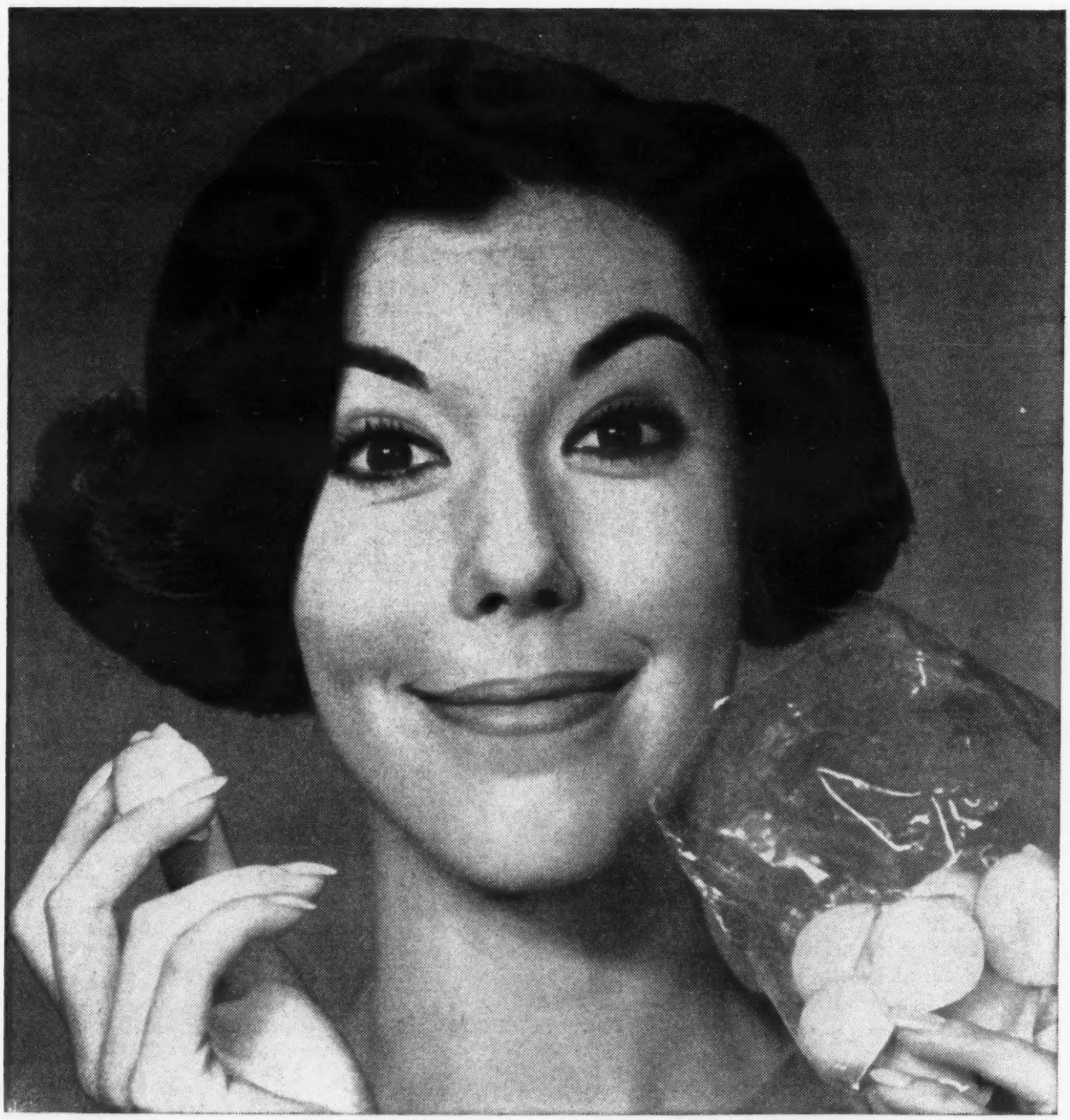
ORANGE PIGMENTS

Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish, cns lb. 1.80 - 2.30
Orris root, Florentine, bls lb. .55 • —
powd., bbls., bxs lb. .65 • —
Verona, bls lb. .35 • —
powd., bbls., bxs lb. .45 • —
Orthoanisidine (see o-Anisidine).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde).
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid).
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine).
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary amylphenol (see o-tert-Amylphenol).
Orthotolidine (see o-Tolidine base).
Orthotoluidine (see o-Toluidine).
Ouabain, USP, bots. gram. 3.00 - 4.00
Ouricury, wax, crude, bgs lb. .50 • .52
Refd., pure, bgs lb. .53 • .55
Oxalic acid, bgs., c.l., works lb. .18 • —
bgs., 10,000-lb. lots, works lb. .19 • —
bgs., smaller lots, works lb. .20½- —
Oxalic acid in drums is priced ½c. per lb. higher.
o-Oxynaphthoic acid, pigment manufacture, dms., frt. alld lb. .912 • —
Dyestuff manufacture, dms., same basis lb. 1.03 - 1.14
Oxyquinolin sulfate, cns., 100-lb. lots, works lb. 4.75 - 5.00
cns., smaller lots, works lb. 4.92 - 5.17

P

Palm oil, clarif., dms lb. .14½- .15¼
tanks, New York lb. .11¾- —
Palm oil acid, double dist. dms. lb. .16½- .19
tanks lb. .14 • —
single dist., dms. lb. .16 • .18¼
tanks lb. 13½- —
Palmarosa oil, cns. lb. 5.25 - 6.50
Papain, powd., bots. lb. 3.25 -10.00
Papaverine hydrochloride, nat. or syn., USP, cns., 25-oz. to 100-oz. lots oz. 5.00 • —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat., or syn., USP, cns. oz. 7.10 - 7.35
Paprika, Bulgarian, bgs lb. .34 • —
Hungarian, bgs. lb. .33 • —
Spanish, bgs. lb. .39 • —
Para-aminobenzoic acid (see p-Aminobenzoic acid).
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen).
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine-m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachlorophenol (see p-Chlorophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline).
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F., ASTM, tanks, refy. lb. .0655- .0660
Fully refd., 122°-124°F., ASTM, lb. .0765- —
125°-127°F., ASTM, tanks, refy. lb. .0765- —
130°-132°F., ASTM, tanks, refy. lb. .0765- —
132°-134° F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks east coast refy gal. .17½- —
Paraffin wax (see Paraffin)
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .10 • —
bgs., l.c.l., frt. alld lb. .12 • .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
Paraformaldehyde USP-X, fib. dms., c.l., f.o.b., works lb. .19 • —
fib. dms., 1,000-lb. lots, same basis lb. .20 • —
fib. dms., smaller lots, same basis lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd. E lb. .14 • —
55-gal. dms., l.c.l., dlvd. E lb. .15½- —
tanks, dlvd. E lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene).



They never had it so orange!

Reason: a more intense orange oil—Exchange Brand—with the richer, fuller flavor of the finest California oranges. That's why less than one ounce gives *fuller* flavor to a one-hundred-pound batch of cream centers.

When results are so dramatic, why skimp? Insist on Exchange Brand Orange Oil. Its uniformity is assured by the Sunkist name—and it comes to you in sealed tamper-proof containers.

Exchange

ORANGE OIL, U.S.P., CALIFORNIA COLD PRESSED 100% NATURAL OIL

Sunkist Growers

Products Sales Department, Ontario, California

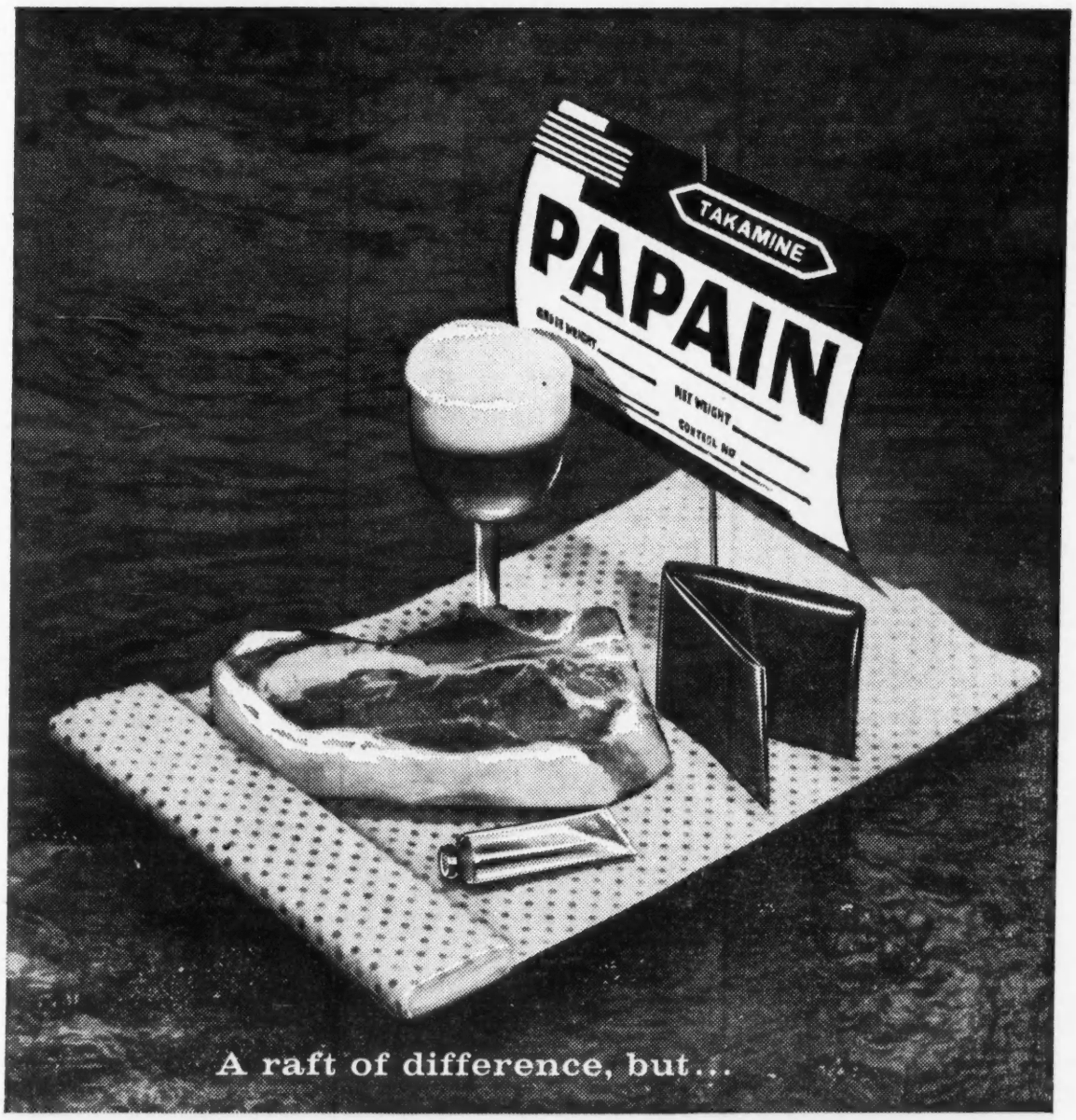
Sunkist Products Division Offices
60 Park Place, Newark 2, N. J.
400 West Madison Street, Chicago 6, Ill.
318 Cadiz Street, Dallas 7, Tex.

Also distributed in U.S. and Canada by Ungerer & Co.

Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, ethyl, dms., frt. alld lb. .84 —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Para toner, red, bbls. lb. 1.30 - —
Chlorinated, kgs. lb. 1.41 - —
Passion flower herb, bls. lb. .35 .40
Patchouli oil, imp., cns. lb. 5.00 - 5.60
Peach kernel oil USP (see Apricot kernel oil).
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd E of Rockies lb. 1.00 —
Peacock blue price 1c. higher W of Rockies.
Peanut meal, old process, 45%, bgs., f.o.b. mills ton.70.00 -72.00
solvent, same basis ton.68.00 - —
Peanut oil crude, tanks, f.o.b. mills. lb. .18½- —
Refd., dms. lb. .23¾- .24
tanks lb. .21¾- —
Pectin, dom., NF, citrus, powd., 100 kilos, f.o.b. shipt. pt. kilo. 4.52 —
Pelargonic acid, dms., c.l., dlvd. E lb. .27½- —
ton lots, same basis lb. .28½- —
tanks, same basis lb. .25 - —
Penicillin, potassium, cryst., bulk, 1,000,000 units. .018 - —
Penicillin, procaine, cryst., bulk, 1,000,000 units. .020 - —
Pennyroyal oil USP imported, cns. lb. 2.35 - 2.80
Pentachlorophenol, 50-lb. bgs., c.l., t.l., works, frt. equald lb. .21 - —
bgs., less than ton-lots, same basis. lb. .29 - —
bgs., c.l., t.l., 2,000 lb. minimum, same basis lb. .22½- —
Pentachlorophenol in dms. 1c. higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .29 - —
bgs., l.c.l., dlvd lb. .30 - —
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb. 6.00 - —
Pepper, black, Malabar, bgs lb. .38½- —
Lampong, bgs. lb. .38½- —
Red, Funtuas, bgs. lb. .30 - .31
Japanese, Hontaka, bgs lb. .35 - —
Santaka, bgs. lb. .30 - .31
Sudanese, bgs. lb. .40 - —
White, Muntok, bgs lb. .51 - —
Peppermint leaves, dom., USP, bls., dms lb. No stocks.
imp., USP dms. lb. .85 - .90
Peppermint oil, nat., dms. lb. 3.50 - 4.00
Redist., USP, dms. lb. 3.75 - 4.25
Perchloroethylene dms., c.l., or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd. lb. .15¼- —
tanks, dlvd lb. .11¾- —
tanktruck 1,000 gal. min. dlvd lb. .12¼- —
Peri acid, dry bbls., frt. alld lb. 1.60 - —
Paste, bbls. frt. alld lb. 1.55 - —
Peru balsam, dms lb 1.15 - 1.50
Persic oil USP (see Apricot kernel oil).
Petitgrain oil South American, cns., dms lb. 2.45 - —
Petrolatum, NF, cream, dms., c.l., refy lb. .085 - 08625
dms., l.c.l., dlvd lb. .11125-11250
tanks, refy. lb. .0625- .06375
NF, extra amber, dms., c.l., refy. lb. .07625- —
dms., l.c.l., dlvd lb. .1025- —
tanks, refy. lb. .05375- —
NF, soft yellow, dms., c.l., refy lb. .07625- —
dms., l.c.l., dlvd. lb. .1025- —
tanks, refy. lb. .05375- —
USP lily white, dms., c.l., refy lb .09125-.09675
dms., l.c.l., dlvd. lb. .1175- .1225
tanks, refy. lb. .06875- —
USP, snow white, dms., c.l., refy. lb. .09625- —
dms., l.c.l., dlvd. lb. .1225- —
tanks, refy. lb. .07375- —
Full tankwagons of petrolatum are ¼c. more per lb. than tankcars.
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret dms., c.l., works. lb. .16½- .18¾
non-ret. dms., l.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., c.l., frt. alld. E lb .91 - —
dms., l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.05 - —
dms. same basis lb. 1.08 - —
Phenobarbital, USP, dms., 100-lbs., frt. alld lb. 2.83 - 3.25
Phenobarbital-Sodium (see sodium phenobarbital)
Phenol, 90-92% (cresol 8-10%), non-ret. dms., frt. alld E. of Rockies lb. .16½- —
non-ret. dms., l.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
82-84% (cresol 46-13%), non-ret. dms., c.l., same basis lb. .16¼- —
non-ret. dms., l.c.l., same basis. lb. .17¼- —
tanks, same basis lb. .14¼- —
39°C., or above, tar dist., non-ret. dms., c.l., same basis lb. .17¾- —
non-ret. dms., l.c.l. lb. .18¾- —
tanks, same basis lb. .15¾- —
Phenol, USP, syn., dms., c.l., t.l., frt. alld. lb. .18¼- —
dms., l.c.l., same basis lb. .20¼- —
tanks, same basis lb. .16¼- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld lb. 1.30 - —
250-lb dm., same basis lb. 1.35 - —
Phenothiazine drench, fib. dms., t.l., dlvd lb. .46 - —
fib. dms., ton lots, dlvd lb. .49 - —
NF, fib. dms., t.l., dlvd lb. .45 - —
fib. dms., ton lots, dlvd lb. .48 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol)
Phenylacetaldehyde, soln., 50%, bots. lb. 2.15 - 2.35
100%, bots. lb. 3.80 - 4.00
Phenylacetic acid, pure, cryst., cns lb 1.25 - 1.75
dl-Phenylalanine, dms., 1-kilo. kilo.65.00 - —
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms., 200-lb. lots, dlvd. E lb. 3.45 - —
fib dms., smaller lots, dlvd. E lb. 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E. lb. .50 - —
dms., l.c.l., dlvd. E lb. .51½- —
tanks, dlvd. E lb. .47½- —
m-Phenylenediamine, dms., c.l., t.l., frt. alld lb. 1.08 - —
l.c.l., l.t.l., same basis lb. 1.10 - —
o-Phenylenediamine, comi. fib. dms, 100 to 1,000 lbs., works. lb. 1.70 - 1.80
p-Phenylenediamine, tech., dms, works lb. 1.55 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., l.c.l., same basis lb. .76¼- —
Phenylethyl acetate, bots. lb. 1.25 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 1.50
Standard, dms. lb. 1.10 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more, frt. alld lb. 1.50 - —
dms. smaller lots, frt alld lb. 1.70 1.85
Phenylethylphenyl acetate, bots lb 4.00 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine 97% 450-lb dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E. 1.80 - —
fib. dms., smaller lots, dlvd E lb. 2.10 - —
o-Phenylphenol, dms., l.c.l. works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., l.c.l., works lb. .43 - —
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
CP, bots., works lb.17.75 - —
Tech., fib. dms., works lb.10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports, New Orleans ton.46.50 - —
Phosphate rock, Florida, land pebble run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l., mines. short-ton. 5.22 - 5.629
68-70%, b.p.l., bulk, c.l., same basis short-ton. 6.08 - 6.089
70-72%, b.p.l., bulk, c.l., same basis short-ton. 6.66 - 6.669
74-75%, b.p.l., bulk, c.l., same basis short-ton. 7.56 - 7.569
76-77%, b.p.l., c.l., bulk, same basis short-ton. 8.45 - 8.459
Above Florida prices are based on fuel oil at 2.52 per bbl. and labor at $1.72.
Phosphoric acid, food grade, 75%, chys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
chys., l.c.l., same basis 100 lbs 7.25 7.75
tanks, t.w., works 100 lbs. 5.60 —
80% chys., c.l. frt equald 100 lbs .85 —
chys., l.c.l., works 100 lbs 8.10 9.35
tanks, t.w., works 100 lbs 6.00 —
NF 85%, chys., c.l., works. 100 lbs 8.50 —
chys., l.c.l., works 100 lbs 8.75 9.00
tanks, t.w., works 100 lbs 6.65 —
Phosphorus, amorph., red, dms., t.l., works lb. .55 —
dms., smaller lots, works lb. .56 .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 .20½
dms., l.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 —
dms., l.c.l., works lb. 15 —
tanks, works, frt. equald lb 12½ —
Phosphorus pentasulfide, powd., dms., c.l. works lb. 13½ —
dms. l.c.l. works lb. 14½ 15½
Solid, dms., c.l. works lb. 11½ —
dms. l.c.l. works lb. 12½ 13½
Phosphorus pentoxide, dms., c.l., works lb. 1375- 1475
dms. l.c.l. works lb. 1475- 1675
Phosphorus sesquisulfide, dms., cs., c.l., works lb. 38 —
dms. l.c.l. works lb 39 40
Phosphorus trichloride, dms., c.l., works lb. 14 —
dms. l.c.l., works lb. 15 —
tanks, works lb 12½ —
Phthalic anhydride bgs., c.l., works, frt. equald lb. .15½- —
bgs., l.c.l., same basis lb. .16½- —
tanks, same basis lb. .15 - —
Phthalimide 97-98%, dms., frt. alld lb .65 —
Phthalocyanine blue toner, crystallizing type, bbls. dlvd. E. of Rockies lb. 3.00 - —
Crystal stable type, same basis lb. 3.25 - —
Aqueous dispersions, same basis lb. .68 - —
Polyolefin blue colors, same basis lb. 1.66 - —
Resinated, bbls., same basis lb 2.75 —
Water dispersable, bbls., same basis lb 1.52 —
Phthalocyanine blue prices 1c. higher W of Rockies.



ALL IN THE SAME BOAT

Odd assortment of products to picture together? Maybe. But they do have one thing in common — a need for papain that is uniform in activity, purity . . . batch after batch. Takamine enzyme experience has the answer...experience that extends over 60 years with a wider variety of enzymes than any other manufacturer. In the process, Takamine has put together manufacturing techniques that enable us to keep rigid, precise control of papain activity. Next time you order papain, take the measure of ours. And if you have other enzyme needs (or think you might have), let's sit down and talk it over.

MILES Chemical Company

T-7-2 TAKAMINE®

Division of Miles Laboratories, Inc. Elkhart, Indiana—COngress 4-3111
Clifton N. J.—772-4800 • New York, N. Y.—MUrray Hill 2-7970

Phthalocyanine Green Toner—Silica

Phthalocyanine green toner, all grades, bbls., works ... lb. 3.50 - —
Aqueous dispersions, same basis lb. .78 - —
Polyolefin green colors, same basis lb. 1.68 - —
Resinated, bbls. ... lb. 3.10 - —
Water dispersable, bbls. ... lb. 1.69 - —
Phthalocyanine green prices 1c higher W of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb lots or more lb 5.00 - —
NF fib dms lb 5.20 - —
a-Picoline dms. c.l., works, frt. equald lb. .46 .48
dms., t.c.l., same basis lb. .46½ .49
tanks, same basis lb. .43 .46
b-Picoline 98% dms., t.l., works. lb. .65 - —
dms., l.c.l., same basis ... lb. .68½ - —
tanks, same basis ... lb. .60 - —
b,g-Picoline 5°C. dms., c.l., works. lb. .32½ - —
dms. t.c.l. works lb. .33 - —
g-Picoline, tanks, f.o.b. works lb. .60 - —
dms., c.l., t.l., same basis ... lb. .70 - —
dms., l.c.l., t.t.l., same basis ... lb. .73½ - —
Picric acid, NF bbls. ... lb. .85 - —
Tech., bbls ... lb. .50 - —
Pigment green B, kgs ... lb 1.55 - —
Pilocarpine hydrochloride, USP, bots oz. 4.75 5.25
Pilocarpine nitrate USP bots., vials. oz. 4.65 5.15
Pimento, Jamaican, bgs. ... lb. .69 .72
Mexican, bgs. ... lb. .60 - —
Pimento berry oil, NF, dms. ... lb. 3.75 9.25
Pimento leaf oil, crude, cns ... lb 2.50 2.60
Pine oil, dest dist., dms., t.c.l. works lb. .15 —
dms. t.c.l ex whse New York. lb. .173 —
Steam-dist. dms. ex whse., New York lb. .185 - —
dms., dlvd ... lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil).
Pink root, bls. ... lb. 2.50 - —
Piperazine anhyd., dms., c.l., frt. alld. E lb. 1.80 - —
dms., t.c.l., frt alld E lb. 1.85 - —
Piperazine citrate, 36% dms., 1,000 lbs or more, frt. alld lb. 1.33 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs or more, frt alld lb. 1.29 - —
Piperazine hexahydrate, 44%, dms., 1,000 lbs. or more, frt. alld lb. .90 - —
dms., 200-900 lbs., frt. alld lb. .93 - —
Piperazine phosphate, 42%, dms., 1,000 lbs or more, frt. alld lb. 1.11 - —
Piperidine, dist., 98% min., 5 dms. or more, t.c.l., t.t.l., f.o.b. works lb 2.65 - —
1-4 dms, same basis lb 2.70 - —
dms., c.l., t.l., frt. equald lb 2.55 - —
Piperonyl butoxide dms. dlvd E.lb 4.50 5.05

PITCHES
Pitch quotations are listed individually. For example, prices on Pitch, coaltar, may be found in the C's under Coaltar pitch.

Platinum metal, works ... oz. 81.00 -85.00
Pleurisy root bls. ... lb. .45 .50
Podophyllum resin, NF, dms lb 12.50 -15.50
Poke root bls. ... lb. .19 .22
Polymyxin bots., bulk., 50 billion units or more 1,000,000 units. .52 - —
bulk, bots., 25-50 billion units. 1,000,000 units. .54 - —
bulk, bots., 1-25 billion units. 1,000,000 units. .56 - —
Polyoxyethylene sorbitan monostearate dms., 20,000-lb. lots, works lb. .42 - —
dms. 10,000-20,000-lb lots, works. lb. .44 - —
dms smaller lots works lb. .47 .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works lb. .42 —
dms. 10,000-20,000-lb lots, works lb. .44 - —
dms., smaller lots works lb. .47 .49
Poppy seed, Argentine, bgs. ... No stocks.
Dutch, bgs. ... lb. .12 - —
Danish, bgs. ... lb. .10 - —
Polish, bgs. ... lb. .11 - —
Turkish, bgs. ... lb. .11 - —
Potash caustic, liq. 45% basis, dms., c.l. works 100 lbs 4.25 - —
dms., t.c.l., same basis 100 lbs. 5.25 - —
tanks, same basis 100 lbs 3.70 - —
Potash, reg., flake, 88-92%, dms., c.l., reg., flake 88-92% dms. c.l. same basis 100 lbs. 9.55 - —
dms., t.c.l., same basis 100 lbs. 11.05 - —
solid, 88-92%, dms., c.l., works 100 lb. 9.10 - —
dms t.c.l., works 100 lbs. 10.60 - —
Potassium acetate NF, 200-lb dm. f.o.b. works E lb. .33 - —
Potassium bicarbonate, USP, gran., dms lb .22 - —
powd. dms lb .24 —
Potassium bichromate, gran. bgs., c.l. t.l., works lb. .18 —
bgs. t.c.l. works lb. 18½ 19¾
Potassium bichromate in dms. ¾c higher
Potassium bitartrate, NF, gran., powd. 100-lb bgs., c.l., frt. equald lb. .37 —
100-lb bgs. 5,000 lbs. 1 shipt., same basis lb. .38 —
100-lb bgs. smaller lots, same basis lb. .40 —
Potassium borohydride powd. dms., works lb 16.00 22.00
Pelletized potassium borohydride $1.25 per lb higher in 1,000-lb lots
Potassium bromate, 200-lb. dms., c.l. frt alld lb. .49 —
Potassium bromide, USP gran., bbls., kgs lb. .39 .40
Potassium carbonate, dom. NF, gran., bbls., dms lb. .22 .24
Dom. tech powd., bbls. dms lb .21 .22
Dom. calcinated bgs. c.l. works 100 lbs. 8.50 —
bgs. t.c.l. same basis 100 lbs 9.55 —
Dom. hydrated 83-85%, bgs. c.l., works 100 lbs 7.10 - —
bgs. t.c.l. works 100 lbs 8.15 —
Potassium chlorate cryst. dms., c.l., works lb. .12¼ —
dms. t.c.l. works lb. .13½ .14½
Powd. dms., c.l., works lb. .12¾ —
dms. t.c.l. works lb. .14 .15
works lb. .12¼ —
Potassium chlorate, NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾ —
NF gran. 25-lb metal dms lb .36 —
NF powd., dms., 2,000 lbs. or more, works lb. .17¼ —

Potassium chloride, indust., 99.9% KCL, bulk, c.l., works ton. 31.00 - —
bgs., c.l., works ton. 36.00 - —
99.3% KCL, bulk, c.l., works ton. 30.00 - —
bgs., c.l., works lb. 35.00 - —
USP, cryst., dms lb. 33.00 - —
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate).
Potassium chromate, tech., dms., works lb. .50 .51
Potassium citrate, NF gran. 250-lb. dms., f.o.b., works E lb. .41½ - —
Potassium cyanide dms., 20,000-lb. lots or more, dlvd. E lb. .42½ - —
dms., 5,000-19,999-lb. lots, works lb. .43 —
dms., 2,000-4,999-lb. lots lb. .43½ - —
dms., 1,999-lb. lots or less lb. .44½ 46½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide dms., ton lots, works lb. .50 —
dms. smaller lots works lb. .65 —
Potassium ferrocyanide dms., ton lots lb. .24½ - —
dms. smaller lots lb. .29 —
Potassium fluoborate fib dms, c.l., works lb. .30 —
fib dms. t.c.l. works lb. .31 - —
Potassium fluoride, dms., works lb. .36 - .37
Potassium gluconate, 100-lb dm., f.o.b works E lb 1.67 —
Potassium guaiacol sulfonate NF, dms lb 2.10 2.30
Potassium hydroxide tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb 33½ .38
Potassium hypophosphite, NF fib dms. 1,000 lb lots lb 1.38 —
Potassium iodide USP cryst., 250-lb. dm., f.o.b works lb. 1.55 - —
Potassium manure salt, min. 20% K2O, bulk, c.l., works, unit-ton. .17 .1765
Potassium metabisulfite, gran. dms., lb. .16 —
Powd., dms lb. .27 - —
Potassium muriate, standard, bulk, c.l., works, unit-ton. .37 - .39
bagged 60% minimum K_2O, same basis ton. 27.20 -28.40
Potassium muriate, gran., bulk, c.l., works, unit-ton. .40 - .41
bagged, 60% minimum K_2O, same basis ton. 29.00 -30.20
Inside prices apply to material contracted for prior to July 1, 1961.
Outside prices apply to material contracted for after that date but also for delivery during the current month
Potassium nitrate, NF cryst., bbls., 20 ton lots 100 lbs 17.00 —
bbls. smaller lots 100 lbs 18.00 19.00
gran. bgs., 20 ton lots 100 lbs 9.50 —
bgs. smaller lots 100 lbs 11.00 12.00
powd., bgs. 20-ton lots 100 lbs 10.50 —
bgs. smaller lots 100 lbs 12.00 13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm. f.o.b works E lb. .32 —
Potassium pentaborate, gran. dms., c.l. works ton. 219.50 — —
dms., ton lots ex whse 100 lbs 17.48 - —
dms., smaller lots, ex whse 100 lbs 18.73 —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb. 18½ —
dms. t.c.l. works lb. .19 20
Potassium permanganate comm., kgs. works lb. .25 .33
USP dms. works lb. .29 .35
Potassium pyrophosphate, tetrabasic, dms., works lb 1475 1575
Potassium prussiate red (see Potassium terrocyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide)
Potassium silicate electrical grade, 30° Be. 1:2.0, dms., c.l., works 100 lbs. 6.50 - —
dms., t.c.l., 5 dm. lots or more works 100 lbs 7.25 7.65
tanks, works 100 lbs 6.15 — —
40.5° Be 1:2.1, dms., c.l., works. 100 lbs. 5.95 - —
dms. t.c.l. 5 dm. lots or more, works 100 lbs 6.70 - —
tanks works 100 lbs 5.60 — —
Glass grade, bgs. c.l., works 100 lbs. 17.30 -18.00
bgs. t.c.l., works 100 lbs. 17.80 — —
Soln., 29° Be 1:2.5, dms., c.l., works 100 lbs. 4.95 - —
dms. t.c.l. 5-dm lots or more works 100 lbs 5.70 - —
tanks works 100 lbs 4.60 — —
Potassium silicofluoride, bgs. works lb 09½ 10
Potassium silicofluoride in drums, 0.4c per lb higher
Potassium stannate dms. frt alld. lb. .866 - .938
Potassium sulfate, min. 50% K_2O, agricultural, bulk, c.l., work unit-ton. .70½ - .72½
Inside price applies to tonnage contracted for prior to July 1, 1961
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate NF VII, cryst., dms. lb. .31 .33
NF VII, gran. 400-lb. dm lb. .18 —
NF VII powd. 400-lb dm lb. .17 —
Potassium sulfocyanate NF cryst., (see Potassium thiocyanate)
Potassium thiocyanate NF cryst., dms. works lb. .96 98
Tech. dms. works lb. 77 79
Potassium titanate cmps. c.l., works. lb. 16¼ —
ctns. 5-ton lots works lb. 16½ - —
ctns. 1-ton lots or less works lb. 16¾ - —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk works, base price. ton 13.45 - —
bulk works July forward ton 14.00 - —
Potassium-sodium tartrate, NF gran or powd. 250-lb dms., c.l., works E lb 42½ - —
250-lb dms. 5,000-lb lots, same basis lb. .43 —
250-lb dms. same basis lb. .43½ - —
Potassium-titanium fluoride, fib. dms. works lb. .39 .40
Potassium-zirconium flouride, fib. dms. c.l., works lb. .50 —
fib dms. t.c.l. works lb. .52½ .55
Pregnenolone bots. gram. No prices.
Pregnenolone acetate bots gram. No prices.
Procaine hydrochloride USP antibiotic grade dms., 2,000-lb lots, frt. alld. lb. 2.10 2.25
Procaine hydrochloride, USP, ampule grade, dms., 1,000-lb. lots, frt. alld lb. 2.40 - —
dms., 500 lbs ... lb. 2.45 - —
dms., 100 lbs ... lb. 2.50 - —
Progesterone, USP, bots ... gram. No prices.
Pregnenolone acetate, bots ... gram. No prices.
Propenyl guaethol dms. ... lb. 24.30 -27.00
b-Propriolactone tech., dms., c.l., f.o.b. works lb. .47½ - —
dms., t.c.l., t.t.l., same basis lb. .48½ - —
tanks, same basis lb. .45 - —
Propionic acid syn. pure, dms., c.l., dlvd lb. .23¼ - —
dms., t.c.l., dlvd. ... lb. .24¾ - —
tanks, dlvd ... lb. .20¾ - —
n-Propyl acetate dms., c.l., dlvd. lb. .14¾ - —
dms., t.c.l., dlvd ... lb. .16¼ - —
tanks, dlvd ... lb. .12¼ - —
n-Propyl alcohol, dms. c.l., dlvd. lb. .14 - .15
dms., t.c.l., dlvd ... lb. .15½ - .16½
tanks, dlvd ... lb. .11½ - .12½
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb. 3.90 - 4.40
n-Propyl-p-hydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propyl thiouracil bots., 50 kilo lots or more kilo. 55.00 - —
bots., smaller lots kilo. 55.10 -55.30
n-Propylamine dms. c.l., dlvd lb. 1.24 - —
dms. t.c.l. same basis lb. 1.255 - —
n-Propylene dichloride consumers', dms. c.l. dlvd. E lb. .0845- —
dms., t.c.l. same basis ... lb. .0995- —
tanks same basis ... lb. .07 - —
Propylene dichloride prices in West 1c. higher same basis
Propylene glycol indust., dms., c.l., dlvd. E lb. .15 - —
dms., t.c.l., same basis ... lb. .16¾ - —
tanks, same basis ... lb. .12½ - —
USP dms. c.l., dlvd E ... lb. .17 - —
dms. t.c.l. same basis ... lb. .18¾ - —
tanks, same basis ... lb. .14½ - —
Propylene glycol methyl ether, dms., c.l., dlvd lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis ... lb. .18½ - —
Propylene oxide dms. c.l., dlvd. E, lb. .17 - —
dms., t.c.l., dlvd E ... lb. .18½ - —
tanks, dlvd E ... lb. .14½ - —
Psyllium seed, black, bgs. ... lb. .42 - .45
Blonde bgs ... lb. .18 - .20
Husks, bgs. ... lb. .45 - .48
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾- .04¼
bgs., smaller lots lb. .03¾- —
Pumice, imp., Italian, silk-screen, coarse, bgs., ton lots, lb. .06½- —
fine, bgs ton lots lb. .04 - —
sun dried coarse, bgs ton. 60.00 —
fine bgs ton. 60.00 -70.00
Pumpkin seed ngs lb. .25 - .28
Pyrethrins syn (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins, bgs., ton, works lb. .50 - —
Powd., 1.3% pyrethrins, bgs., ton works lb. .71 - —
Pyrethrum liquid, 20:1 basis (2 grams pyrethrins per 100cc odorless base), gal. 9.60 - 9.80
100/1 basis (10 grams pyrethrine per 100cc odorless base), dms. works gal. 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20%, dms., works lb. 11.00 -11.35
purif, 20% dms works lb. 11.00 -11.35
Pyridine, denat. dms. c.l. works and frt. equald gal. 2.77 - —
dms., t.c.l. same basis gal. 2.80 - —
Refd., 2° non-ret. dms., c.l., same basis lb. .75½ - —
dms., t.c.l., same basis ... lb. .76 - .76½
tanks, same basis ... lb. .71 - —
Potassium persulfate, dms., c.l., works lb. .18 - .21
dms. t.c.l. works lb. .18 - .21
Pyridoxine hydrochloride, USP, dms., f.o.b. works kilo. 90.00 - —
Pyrites, Canadian 48-50% S, mines, long-ton. 4.50 - 5.00
Pyrocatechol (see Catechol)
Pyrogallic acid NF (see Pyrogallol).
Pyrogallic acid tech. bbls. 100-lbs., f.o.b. works lb. 3.50 - —
Pyrogallol, NF 100-lb dms ... lb. 3.50 - —
Pyroxylin USP bots ... lb. 9.50 - —

Q

Quassia chips lb. .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb. 1.55 - 1.75
Quinidine sulfate USP, 1,000-oz. dm oz. .78½- —
Quinine, NF, 1,000-oz. dm oz. .3750- —
Quinine bisulfate USP 1,000-oz. dm. oz. .28 - —
Quinine hydrochloride, 1,000-oz. dm. oz. .3650- —
Quinine sulfate USP 1,000-oz. dm. oz. .3150- —
Quinoline dms. c.l. frt. equald. lb. .50¾- —
dms., t.c.l., same basis ... lb. .51¼- —
tanks, same basis ... lb. .50 - —

R

R salt paste, dms., c.l., t.l., frt. alld., 100% basis lb. .98 - —
Powd., dms., c.l., t.l., frt. alld, 100% basis lb. 1.08 - —
Rapeseed oil, dms lb. .17½- .17¾
tanks lb. .15½- —
Rare earth oxalate, NF, 45-50%, bgs works lb. 1.15 - —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.00 - 1.20
Red carmine No 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner

Red precipitate (see Mercuric oxide, red)
Red toner Lake C, alizanine, bbls., works lb. 1.30 - —
Reserpine, cryst. bots gram. 1.25 - —
Resorcinol, tech grade, bgs., c.l., works, frt equald lb. 77½- —
bgs., t.c.l., same basis ... lb. .78½- —
Resorcinol in dms. 1c. per lb more.
Resorcinol monoacetate, NF, dms. lb. 2.50 - —
USP powd., dms. works lb. 2.95 - —
Rhatany root, bgs lb. .14 - .16
Rhodamine red toner, molybdated, PMA kgs. works lb. 6.00 - —
Tungstated PTMA works, kgs lb. 6.60 - —
Rhodinol, 5-lb cans lb. 42.00 -51.00
Synthetic ... lb. 14.00 -16.00
Rhubarb root, india, whole, bgs lb. .25 - —
powd. bgs lb. .35 - —
Riboflavin USP fib dms., kilo or more, dlvd kilo. 36.00 - —
Riboflavin-5 phosphate-sodium, fib. dms. kilo or more, dlvd. kilo. 104.70 - —
Rice bran oil, clarified, dms., t.c.l. lb. .13¾- —
tanks, dlvd. E ... lb. .14 - —
Ricinoleic acid (see Castor oil acids split).
Rochelle salt (see Potassium-sodium tartrate)
Roofing pitch (see Coaltar pitch, roofing).
Rose oil, nat., Bulgarian, bots lb. 1,152.00- —
Turkish, bots., otto ... lb. 600.00 -700.00
absolute ... lb. 145.00 - —
Rosemary oil, Spanish, NF, cns., dms lb. 1.15 - 1.20
Spanish, tech., cns., dms ... lb. .80 - .95
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib. dms., works unit-lb. .10½- —
Resin, 25-45%, fib. dms., works, unit-lb. .10½- —
Rottenstone, bgs., 5-ton lots, ex-whse lb. .03¾- —
bgs. ton lots, same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 ... gal. .13875- —
Houston, Texas ... gal. .155 - —
Rue oil, bots. ... lb. 2.55 - 2.75
Rutin, NF fib dms., 10 kilo lots. kilo. 11.00 - —
fib. dms., 5 kilo lots kilo. 11.50 - —
fib. dms., 1 kilo ... kilo 13.00 - —
Ryania, 100% powd., bgs., c.l., works lb. .22 - —
bgs., t.c.l., same basis lb. .24 - —

S

S acid, bbls., works ... lb. 3.25 - —
Sabadilla seed, activated, calc., 50%, ground with lime, bgs lb. .48 - .70
Saccharin, calcium, fib dms., 1,000-lb lots, works lb. 2.50 - —
Saccharin, USP, gran, soluble, dms., 1,000-lb lots lb. 1.50 - —
dms., smaller lots lb. 1.60 - —
USP, powd., soluble dms., 1,000-lb lots lb. 1.55 - —
dms., smaller lots lb. 1.65 - —
USP, powd., insoluble, dms., 1,000-lb lots lb. 1.53 - —
dms., smaller lots lb. 1.63 - —
Safflower oil, indust, dms., New York, lb. .21 - .2230
tanks, Atl. coast ... lb. .19 - —
Edible, dms., same basis ... lb. .2560- .2660
tanks ... lb. .2360- —
Saffron, Mancha Superior, tins lb. 19.50 - —
Safrol, dms ... lb 65 - —
Sage, Dalmatian, bgs ... lb 40 - —
Greek, cns. ... lb 15 - —
Italian, cns. ... lb 18 - —
Sage oil, clary, bots. ... lb 11.00 -12.00
Dalmatian, cns ... lb 2.65 3.25
Spanish, cns ... lb 1.25 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt equald lb 1.23 - —
dms. t.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 —
Salicylic acid tech, fib dms., c.l., t.l., dlvd lb. 40½- —
fib dms t.c.l. dlvd lb. 44¾- —
USP, cryst., 200-lb. fib dms., 1,000 lbs or more lb. .51¾- —
200-lb fib dms less than 1,000 lbs lb. .54¾- —
100-lb. fib. dms., 1 to 99 lbs, or more lb. .55¾- —
100-lb fib dms less than 1,000 lbs lb. .56¾- —
USP, pwd., 100-lb. fib cans, 1,000 lbs or more lb. .58¾- —
100-lb fib dms. less than 1,000 lbs lb. .61¾- —
Salol, NF gran. bbls. kgs lb 1.20 —
Powdered salol 25c per lb higher.
Salt, rock, paper bgs. c.l. 100 lbs 1.09 - —
Salt, table vacuum common, fine, paper bgs c.l. 100 lbs 1.34 - —
Saltcake, dom. bulk, works, 100% Na_2SO_4 basis ton 28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood E Indian, chips bgs., lb. .55 .66
powd. fib dms lb .75 .76
Sandalwood oil, cns lb 27.00 -30.00
Sarcosine, tech. tanks, f.o.b. works, frt equald lb 1.03 —
lb No stocks.
Sassafras oil, artif., dms lb. 45 - —
Nat., dom. dms lb 1.40 - —
Savory oil, cns lb 4.75 - —
Schaeffer's salt paste, dms., frt alld. 100% basis lb. .85 - —
Powd. bgs. frt alld 100% basis. lb. .95 - —
Scopolamine hydrobromide, USP, 10 oz. lots, bots oz. 15.00 - —
Sebacic acid, CP bgs. c.l. works. lb. .69½- —
bgs. t.c.l., works lb. 71½- —
Purified, bgs c.l., works lb. .65½- —
bgs. l.c.l. works lb. .67½- —
Seidlitz mixture fib dms. 5,000-lb. lots lb. .30½- —
fib dms. smaller lots lb. .31 - .32
Selenium, powd. 99½%, dms., dlvd lb. 5.75 - —
Senega root, bls. ... lb. 2.65 - —
Senna leaves, Alexandria, whole and half, bls lb. .20 - .22
siftings ... lb. .16 - —
Tinneveley, No. 1, bls. ... lb. .26 - .30
No. 2, bls ... lb. .18 - —
No. 3, bls ... lb. .14 - —
pods, bls ... lb. 28 - —
powd. bbls., bxs ... lb 17 - —
Serpentaria root, bls ... lb. 7.00 - 7.50
Sesame oil, USP dms., t.c.l ... lb .37 .38
Sesame seed, Colombian, bgs ... lb. .15½- —
Lebanese, hulled, bgs ... lb. .19 - —
Nicaraguan, hulled, bgs ... lb. .21 - —
nat., bgs. ... lb. .15 - —
Salvadorian, Nat. bgs ... lb. .16 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots ... .47 - —
Bonedry shellacs prices for less than 1,500-lb lots 1c per lb higher for all packages.
Shellac, bleached, refd., bgs., 1,200-lb. lots lb. .56 —
bgs., less than 1,200-lb. lots lb. .57 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .35 - .36
lemon No. 2, bgs. 10-bg. lots, lb. .34 - .35
superfine, bgs., 10-lb. lots lb. .32 - .33
Shellac in 1 to 10-bg lots 1c per lb more.
Shingle stain oil, tar distillate, dms. c.l., works gal. .37 —
dms., t.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna, pigment, burnt, paper bgs., t.c.l., works lb. .07¼- .19¾
Raw, paper bgs., t.c.l., works lb. .07½- .18
Silica, amorph., dry-grd. 325 mesh, bgs., c.l., works ton. 25.00 —
bgs. t.c.l. works, ex whse ton 45.00 -55.00
Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works ton. 20.00 - —
bgs., t.c.l., works ton. 25.00 - —
99½%, 140 mesh bgs., c.l. works ton 15.00 - —
bgs., t.c.l., works ... ton. 20.00 - —

U.S.I. CHEMICAL NEWS

December | A Series of Advertisements for the Chemical Process Industries | 1961

Polyethylene Liners Help Hospitals Curb Infection

Use of polyethylene liners for hampers and trash and garbage can collection is helping hospitals control and reduce antibiotic-resistant strains of staphylococcus aureus infection. Bags come in buff color to mask contents. Bags are watertight, easily closed and can be incinerated without reopening. In addition to eliminating contamination by direct contact, the polyethylene bags reduce air pollution, noise, and costs for can sterilization and replacement.

Polyethylene liner simplifies trash disposal.

Four Subjects Covered in New NFPA Publications

New and revised editions of publications covering four aspects of fire safety precautions in handling chemical materials are now being sold by the National Fire Protection Association, 60 Batterymarch St., Boston 10, Mass. They are:

"Storage, Handling and Processing of Magnesium" — an important revision of the NFPA standard on this metal. 24 pages. $.50

"Liquefied Petroleum Gases" — revised NFPA standard incorporating 47 changes. 104 pages. $.75

"Static Electricity" — a complete revision of the previous publication on this subject. 60 pages. $1.00

"Systems for the Identification of the Fire Hazards of Materials" — new guide providing a simple system of markings to alert fire-fighting personnel to hazards of any material. 20 pages. $.50

World's Largest Helium Plant To Be Built by Panhandle Eastern And National Distillers in Kansas

New Unit To Supply Growing Space-Age Applications

National Distillers and Chemical Corporation, U.S.I. parent company, and Panhandle Eastern Pipe Line Company will build the world's largest helium plant at Liberal, Kansas. Construction of the plant, designed to produce one billion cubic feet of helium a year, is scheduled to start in mid-1962. It is expected to be completed in about two years.

The U. S. Government has signed a 20-year contract for all the plant's projected production as part of its program to conserve the nation's helium resources.

The new plant will be owned by National Helium Corporation, a newly formed company owned equally by the two companies in the venture.

Booming Defense Demands

Helium, once known primarily as the light-weight, non-flammable gas used in dirigibles and balloons, is playing an increasingly important role in the space age. Basic to this demand are its unique properties. In addition to being inert and non-flammable, helium flows through a hole faster and diffuses more rapidly than any other gas. It conducts heat better and transmits sound faster than any other gas except hydrogen. It also conducts electricity better than any gas except neon.

Stored under pressure in missiles, helium pressurizes fuel components. It serves in nuclear reactors as a heat-

(Continued on next page)

Pilot Plant Studies Show Effect of Air Failure On Vinegar Generators

Detailed data on how vinegar production is affected by a breakdown in the aeration system were recently obtained for a battery of sixteen vinegar generators at the U.S.I. Research Laboratory vinegar pilot plant. Such air failures occasionally happen in vinegar plants.

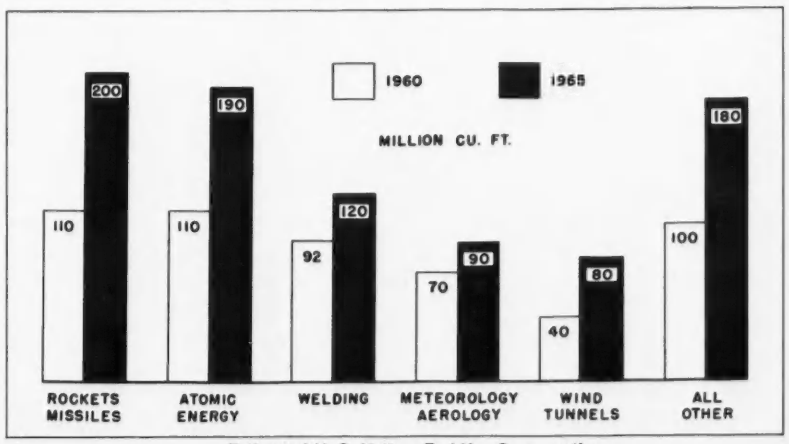
In the U.S.I. pilot plant, circulation of air was interrupted for about two hours. The generators, which were operating under different experimental conditions, all showed decreased bacterial activity following the interruption. This was indicated by a lower rate of acid production in cycles immediately following the air stoppage.

Simultaneously, there was a decrease in oxygen utilization, another index of organism activity.

Influence of Operating Rate

There was a varying decrease in acid production, depending on the rate of operation. Generators operating at a high rate were more seriously affected than those operating at a low rate. For conditions in the U.S.I. pilot plant, it was

(Continued on next page)



Estimated U. S. Helium End-Use Consumption

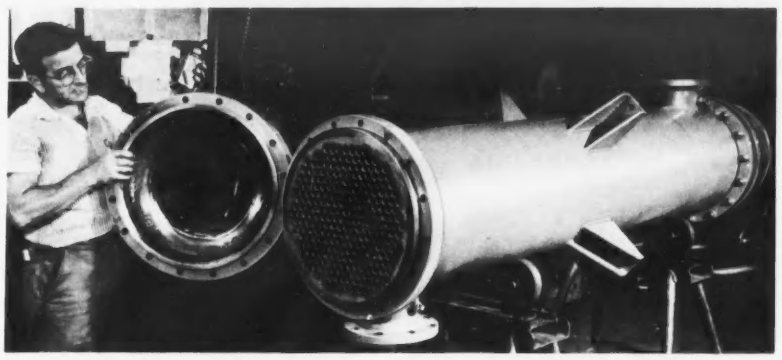


Photo courtesy of The Pfaudler Co.

Titanium Both Tames and Cools Chlorine Gas

Heat exchangers with titanium tubes and rubber-lined shells, such as this one built for Stauffer Chemical Co. by The Pfaudler Co., are replacing glass exchangers for cooling chlorine gas as it comes from production cells. Advantages: titanium's much greater heat transfer rate, resulting in space requirements one-eighth those of glass; titanium's great corrosion resistance, requiring minimum maintenance and permitting installation in relatively inaccessible locations.

Largest Helium Plant *(Continued)*

transfer medium and as a leak detector. Another growing application is in wind tunnel studies of plane and missile design. Helium is used here instead of air because it retains its normal gaseous properties at high pressures and high velocities better than air.

Helium also functions as an inert gaseous shield in welding special metals and in some types of arc-welding. In its liquid form, it provides a cryogenic environment in which some metals become superconductors — a phenomenon utilized in advanced electronic and communications systems. Helium is used as a growth environment for transistor crystals of silicon and germanium. Other uses include its addition to breathing mixtures for deep-sea divers and to oxygen for sufferers from respiratory diseases, and its old role in balloons — now, for meteorology and aerology.

Process Details

In the new plant, helium will be extracted at minus 300°F from natural gas that flows into Panhandle Eastern's main compressor station at Liberal. A billion cubic feet a day of natural gas, averaging four tenths of one per cent helium, will pass through the helium facility and on into the Liberal compressor station.

A major feature of the Liberal plant will be the world's largest "deep-freeze" to be used in extracting helium from natural gas. It will comprise three ten-story-high "cold-boxes" that provide a total of 200,000 cubic feet of freezing space. This makes the plant the largest cryogenics processing operation in the world.

New Analytical Procedures

• **Chromatographic Separation of Ions in Presence of Complexing Agents.** Filter paper strip chromatography is used to separate such ions as Al, Cr(III), Fe(III), Zn, Mn(II), Ni, Co, Ba, Sr, Ca, Mg, Na, K and NH_4 in ternary mixtures with the addition of oxalate, tartrate and citrate as complexing agents, using aqueous alcohol as solvent.

• **Spectrophotometric Determination of Small Amounts of Alcohols.** New spectrophotometric method for determining small amounts of methyl, ethyl, butyl and amyl alcohols is especially useful when organic solvents are employed in extraction processes. Sensitivity is of order of 10 μg/ml of test solution in case of ethyl and methyl alcohols.

Need Alcohol Regulations?

You can still get your personal copy of A&TTD's latest regulations on the distribution and use of specially denatured and tax-free alcohols from U.S.I. Write to Technical Literature Dept., U.S.I. Chemical News, 99 Park Ave., New York 16, N. Y.

Vinegar Studies *(Continued)*

indicated that a two-hour interruption would have little or no effect unless the generator is producing at a daily rate above 16 gallons 100 grain vinegar per 100 cubic feet of packing.

All generators ultimately returned to normal, with recovery times extending up to 38 days for some units.

From these data, it appears that a plant experiencing an air failure can expect a sharp loss in capacity from which it will take some weeks to recover.

TECHNICAL DEVELOPMENTS

Information about manufacturers of these items may be obtained by writing U.S.I.

New water-based adhesive has been developed for laminating aluminum foil to paper, plastics and other surfaces. Product is said to dry transparent, form strong, flexible bond. Applied by conventional coating machines, flow or spray gun. **No. 1780**

Comprehensive bulletin on n-butyl alcohol is now available. Covers specifications, physical properties, chemical references, resin solubilities, extensive list of binary and ternary azeotropes. For surface coating, chemical industries. **No. 1781**

Quantitative filter paper is now available in a special protective polyethylene wrap. Wrapper is said to seal out any trace of dust or dirt that might affect purity, cleanliness and freshness of paper as packaged. **No. 1782**

Uses of diallyl phthalate monomer in polyester resin systems are described in new bulletin. Covers systems used in various resin fabrication techniques as well as use of monomer as carrier for catalysts, pigments, other additives. **No. 1783**

New gas density cell said to provide continuous precise measurement of gas density in pounds per cubic foot, has been introduced. Valuable to gas and chemical industries by making it possible to determine mass flow of gas. **No. 1784**

Carbon-14 and tritium compounds are described in a new listing of 139 ready-for-delivery isotope labeled materials. Information includes specifications, packaging and prices. Compounds are used in chemical and biological research. **No. 1785**

Sterol absorption base derived from pure lanolin is subject of new bulletin. Claimed to be dermatologically innocuous, material functions as emulsifier, emollient and penetrant in cosmetic and pharmaceutical preparations for topical use. **No. 1786**

A completely automatic titrator has been developed. Design is said to permit unattended operation, from measurement of sample through all steps until results appear in digital form. Even back titrations can be automated. **No. 1787**

Basic Principles of Fission Reactors is the title of a new book now being sold. Takes the reader to the stage at which detailed reactor design begins, without assuming previous knowledge of nuclear technology. **No. 1788**

Polyethylene-covered platinum electrode can be used to monitor production and to control aeration of yeast propagation in large and small vessels, recent tests show. Problem of residual currents common with other electrodes is negligible. **No. 1789**

Please use number when writing.

U.S.I.

U. S. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 PARK AVENUE • NEW YORK 16, N. Y.

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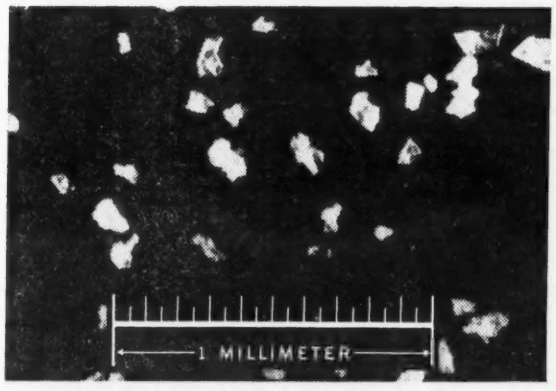
Philadelphia • St. Louis • San Francisco

Silicon tetrachloride, tech., dms., c.l., works lb. .20 - —
tanks, works lb. .15 - —
Silver bullion, ingots, cs., Troy oz. 1.01¾-
Silver cyanide, bots., 1,000-oz. tots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 1,000 to 4,000 oz., f.o.b. works oz. .67¼- —
bots. 250-500 oz., same basis, oz. 67¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate mild, USP, 16-oz. bots oz. 1.46 —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls. lb. .40 —
Powd., bls. lb. .50 - —
Whole, bls. lb. .30 - —
Soda ash dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 —
paper bgs., l.c.l., stock pts., 100 lbs. 3.00 4.77
bulk, c.l. works 100 lbs 1.60 —
Soda ash, light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs. l.c.l., stock pts. 100 lbs 1.55 - —
bulk, c.l. works 100 lbs. 3.95 4.72
Soda caustic, flake, 76%, dms., c.l. works, frt equald 100 lbs 5.20 —
liq. 50% sellers tanks works, dry basis 100 lbs 2.90 - —
50% rayon type sellers tanks works, dry basis 100 lbs 2.90 3.00
Liq. 73% sellers' tanks, works, dry basis 100 lbs. 3.00 —
liq. 73% rayon type, sellers' tanks, works, dry basis lb. 3.00 3.10
solid 76% dms. c.l. works, 100 lbs 4.80 - —
Soda sal conc. bgs. c.l. works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate annyd., bgs., c.l., dlvd. E lb. .14½- —
bgs., l.c.l., same basis lb. .16½- —
NF, 60% gran. dms. c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom. 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb lots or more, frt. adjusted lb. 1.90 - —
Sodium antimoniate bgs. c.l. dlvd. E lb. .27½- —
bgs., l.c.l. dlvd. E lb. .29 - —
Sodium arsenate, 60% arsenic pentoxide, 200 lb. dm. less than ton lots, f.o.b. works lb. .24 - —
ton lots or more, same basis, lb. .23½- —
Sodium arsenite, 94% soluble pink powder, 75% arsenious oxide, dealers, 100-lb dms., ton lots or more, f.o.b., works lb. .18½- —
1,600-1,900 dms., same basis lb. .19 - —
100-500 dms., same basis lb. .20 - —
Sodium ascorbate, dms., 100-kilos, dms., f.o.b. works kilo. 5.60 - —
less than 100-kilos kilo. 5.85 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, 100-lb. dms., ton lots, same basis lb. .43 - —
100-lb. dms., 1,000-lb. lots, same basis. lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l. works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 —
USP powd., bgs., c.l., works, 100 lbs. 2.55 - —
bgs., l.c.l. works 100 lbs. 3.45 - —
Sodium bichromate, gran., ogs., c.l., t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ¾c. per lb. higher
Sodium bifluoride, fib, dms., c.l., works, frt. equald lb. .19½- —
fib. dms., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l. works, 100 lbs. 2.00 —
dms., c.l., frt. equald 100 lbs. 3.00 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 4.10
Sodium bisulfite anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35° bbls., c.l., works. 100 lbs. 1.70 - —
bbls. l.c.l. works 100 lbs. 2.20 - —
Sodium borate (see Borax).
Sodium borohydride, powd., dms., c.l., works lb. 8.00 - —
dms., l.c.l., works lb. 11.75 -14.00
stabilized water soln., 12% $NaBH_4$, 100% basis, tanks, works lb. 7.50 - —
dms., same basis lb. 11.50 -13.00
Pelletized sodium borohydride $1 per lb. higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —
Sodium carbonate, cryst., monohydrated (see Soda, sal).
Sodium carbonate, monohydrated, bgs., l.c.l., works 100 lbs. 3.50 - —
bgs., c.l., works 100 lbs. 3.10 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb. .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb. higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs, lb. .05 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm lots or more works, lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l., works lb. .28 - —
Sodium chromate, anhyd., fib. dms., c.l., t.l., works lb. .14¾- —
fib dms. l.c.l., works lb. .15¼- .16½
Tetrahydrate, bgs., c.l., t.l., works, lb. .1015- —
bgs., l.c.l. lb. .1065- .1190
Sodium citrate, anhyd., 200-lb. dm., f.o.b., works E lb. .60½- —
NF VIII, gran. bgs., c.l., same basis lb. .26 - —
USP XIV, gran., bgs., c.l., same basis lb. .26½- —
Sodium citrate, USP, powd prices ½c higher.
Sodium cyanate, dms., 1,000-lb. lots, works lb. .85 —
dms., smaller lots, works lb. .90 1.10
Sodium cyanide, briquettes or gran., 97 percent min., dms., divd., E. of Rockies, 20,000-lb lots lb. .183 - —
dms., same basis, 5,000 to 19,999-lb. lots lb. .203 - —
dms., same basis, 2,000 to 4,900-lb lots lb. .208 - —
dms., same basis, 1,999-lb. lots and under lb. .218 - —
Sodium cyclamate, 100-lb dm. f.o.b. works lb. 1.95 - —
Sodium diacetate, anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms. c.l., works lb. 18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .15 - —
250-lb dms., l.c.l. works lb. .15¾- —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb .42 - —
dms., l.c.l., t.l.l., same basis lb. .47 - .52
tanks, same basis lb .38 —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¼- —
Sodium fluoride white, 97% fib. dms., c.l., works, frt. equald lb. 1390- —
fib. dms., l.c.l., works, frt. equald lb. 1465 —
Sodium formate, bgs., c.l. works, 100 lbs. 7.05 - —
bgs. l.c.l., ex whse 100 lbs 8.65 - —
Sodium gentisate, 100-lb fib dms. lb 5.50 - —
Sodium gluconate, refd., 250-lb dm., f.o.b. works E lb. .84 - —
Tech., bgs., c.l., t.l., same basis lb. .29½- —
Sodium hydride, 50% soln in oil, dms. works lb. 1.25 2.50
25% soln. in oil, dms. 50 lbs. or less, f.o.b. shipping point, lb. 2.20 - —
dms., 50-99 lbs. same basis lb 1.77 - —
dms., 100-999 lbs. same basis lb 1.20 —
Sodium hydride, dms., 1,000 lbs. or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate).
Sodium hydrosulfite dms c.l., frt. alld lb. 23½ —
dms. l.c.l. frt alld. lb. .23½- —
Sodium hydroxide, NF, pellets, 100-lb dms., 1 to 100-dm. lots, lb .23½- .25
Sodium hydroxide, tech. (see Soda, caustic).
Sodium hypophosphite, NF, dms. 1,000-lb. lots lb. .99 - —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dms., f.o.b. works lb. 2.13 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - —
l.c.l., bgs., works 100 lbs. 4.75 - 5.25
Sodium metabisulfite (see Sodium bisulfite).
Sodium metaborate, octahydrate, gran. bgs. c.l. works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.30 - —
bags, smaller lots, ex whse, 100 lbs. 9.61 -11.61
Tetrahydrate, bgs., c.l., works ton.210.00 - —
Sodium tetrahydrate, bgs., ton lots, ex whse 100 bgs. 14.83 - —
bgs., smaller lots, ex whse 100 lbs. 16.08 -18.08
Sodium metallic, bricks, c.l., works, lb. .21 —
Fused, 18,000-lb lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld. lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt 100 lbs. 11 10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11 70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs., 6,000-12,900 lb. lots, works 100 lbs 6 05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Pentahydrate, bgs., c.l., works 100 lbs. 4.45 - —
bgs., l.c.l., works 100 lbs 4.80 6.75
dms., l.c.l., works 100 lbs 4.95 —
dms., l.c.l., works 100 lbs 5.30 7.25
Sodium molybdate, anhyd., dms., works, frt. equald lb. 1.02 1.21
Cryst., dms., works, frt. alld lb. .84 - .86
Sodium monoglutamate (see Monosodium glutamate)
Sodium monohydrate (see Sodium carbonate monohydrated)
Sodium naphthionate, bbls. lb. .77 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48 00 - —
bulk, c.l., works ton 44 00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton.48.00 - —
bulk, c.l., same basis ton.44 00 - —
Sodium nitrite, USP, bbls., c.l. works, frt. equald 100 lbs. 9.40 - —
bbls., l.c.l., same basis 100 lbs.11.40 - —
Sodium orthosilicate conc., dms., c.l., works 100 lbs 6.70 —
dms., l.c.l., works 100 lbs 7.05 7.65
Hydrated, flake, bbls., c.l., works 100 lbs 5.65 —
bbls., l.c.l. works 100 lbs 7.60 7.90

Get Sodium Bicarbonate in the grain size you need **every time...**

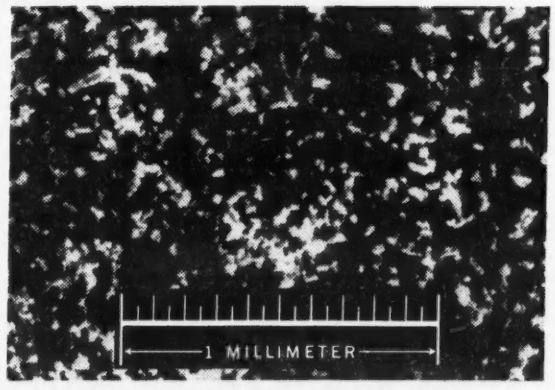
FROM CHURCH & DWIGHT



Sodium Bicarbonate U.S.P. Powdered No. 1—For general purpose use in chemical processing, dyestuffs, adhesives, starches, textiles and industrial applications.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

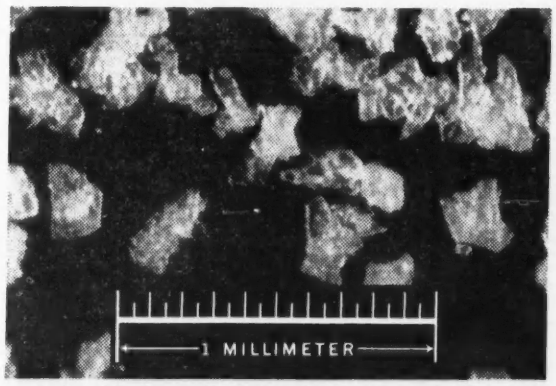
42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%



Sodium Bicarbonate U.S.P. Fine Powdered No. 3DF for use specifically in dry powder fire extinguisher mixes, also in rubber and plastics blowing, lubricant for sheet vinyl.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

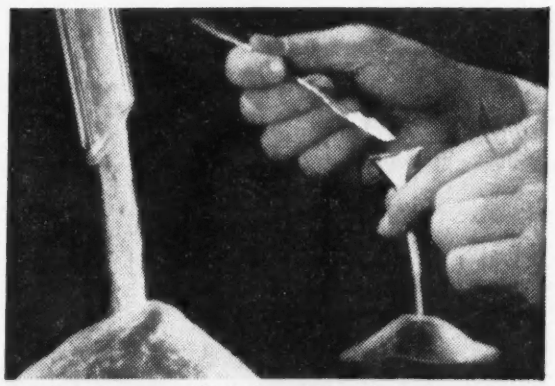
170 Mesh	Trace	325 Mesh	25.0%
200 Mesh	2.0%	400 Mesh	45.0%



Sodium Bicarbonate U.S.P. Granular No. 5 for use in effervescent salts, other pharmaceuticals and special types of cleansers.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	100 Mesh	92.5%
65 Mesh	27.0%	170 Mesh	99.0%
80 Mesh	66.5%		



Sodium Bicarbonate U.S.P. Treated Free-Flowing for use in fire extinguishers and sponge rubber.

TYPICAL SCREEN ANALYSIS
CUMULATIVE PERCENT RETAINED BY

42 Mesh	Trace	200 Mesh	35.0%
100 Mesh	.5%	325 Mesh	70.0%
170 Mesh	20.0%	400 Mesh	80.0%

Are you getting Sodium Bicarbonate of the specific grain size for optimum results in your process or for maximum shelf life and performance of your products? You can eliminate doubts by specifying Church & Dwight. This simple step will assure you of obtaining the widest selection of grain sizes available because Church & Dwight is the country's largest supplier of Sodium Bicarbonate U.S.P. You'll also receive for the asking unmatched technical service based on more than 100 years of experience with Sodium Bicarbonate. Unusual grain size requirements are given special attention. Try us and see. For technical data on all grades of Sodium Bicarbonate, send for brochure, "Church & Dwight Sodium Bicarbonate—How It Serves Industry Today."

CHURCH & DWIGHT CO., INC., 70 PINE STREET, NEW YORK 5, N. Y.

Sodium Oxalate—Sparteine Sulfate

Sodium oxalate, 88%, bgs., works, 100 lbs. 12.35 - —
99% bgs., works 100 lbs. 15.40 - —
Sodium para aminobenzoate (see Sodium p-aminobenzoate)
Sodium para aminosalicylate (see Sodium p-aminosalicylate)
Sodium pentachlorophenate, briquets, dms., c.l., works, frt equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34
Pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentabarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate NF, tech., bgs., c.l., works lb. .137 - —
bgs., l.c.l., works lb. .152 - .215
Sodium peroxide, dms., c.l., t.l., divd E of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb. 3.75 - —
Sodium phenosulfonate, USP, IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt equald 100 lbs 8.10 —
bgs., l.c.l. same basis 100 lbs 8.50 9.55
Sodium phosphate, dibasic, cryst., bgs., c.l., t.l., frt. equald. 100 lbs. 4.75 - —
bgs., l.c.l., frt. equald 100 lbs. 5.15 5.90

Sodium phosphate, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.75 - —
bgs. l.c.l., same basis 100 lbs. 8.25 - —
Monobasic, anhyd. bgs., c.l., frt equald 100 lbs 9.15 —
bgs., l.c.l., same basis 100 lbs. 9.55 -10.15
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.15 —
bgs., l.c.l., frt. equald 100 lbs. 9.60 -10.20
Sodium phosphate in dms. 60c. to 80c. higher than bgs
Sodium phosphate, USP, dried, powd., bgs., dms., works lb. .19 - .20½
Sodium picramate, tech., paste, dms. f.o.b. works, frt. equald lb. .90 - —
Sodium propionate, any quantity, dms. divd E of Rockies, lb. .34½- —
Prices W of Rockies 3c per lb more
Sodium prussiate, yellow (see Sodium ferrocyanide)
Sodium pyrophosphate, acid, bgs., c.l., works, frt equald 100 lbs. 11.25 - —
bgs., l.c.l., same basis 100 lbs. 12.00 -12.50
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms. l.c.l. works lb. .37 - .39
Tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.38 - —
bgs., l.c.l., same basis 100 lbs. 8.13 - —
bulk, hopper cars, same basis. 100 lbs. 6.83 - —

Sodium salicylate, USP, dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs., dms. lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs. 2.35 - —
l.c.l., divd. zone 1 100 lbs. 4.10 - 4.35
divd. zone 2 100 lbs. 4.35 4.60
divd. zone 3 100 lbs. 4.75 4.90
Sodium sesquicarbonate, divd. zone 4 100 lbs. 5.35 - 5.60

Sales zones are (1) All states E. of Miss., R and N of south bound of Ky. and Va., Ala., La. and Miss. south of 31°; Tex. E. of 100°; S of 31° Fla., also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga., Iowa (except Davenport) Minn., Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96° Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs., c.l., t.l., works 100 lbs. 5.70 - —
dms., c.l., t.l., works 100 lbs. 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb. lots, works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.85 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works, 100 lbs. 1.65 - —
dms., l.c.l., works 100 lbs. 1.90 2.40
tanks, works 100 lbs. 1.20 - —
47° Be. 1:2.9.9, turbid, dms., c.l., works 100 lbs. 2.25 —
dms., l.c.l., works 100 lbs. 2.60 - 3.45
tanks, works 100 lbs. 1.90 - —
52° Be. 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —

Sodium silicate, liq., 53° Be. 1:2.4, turbid, dms., l.c.l., works, 100 lbs. 3.00 - 3.50
tanks, works 100 lbs. 2.30 - —
Solid, 1:3.2, bgs., works ton. 67.50 - —
Sodium silicofluoride, bgs., c.l., works, frt. equald. lb. .07 - —
bgs., l.c.l., works, frt. equald. lb. .0775- —
Sodium silicofluoride in dms., 0.4c. per lb. higher.
Sodium stannate, dms., works, frt. alld. E lb. .736 - .802
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .32 - —
Sodium sulfate, NF, VII, dried, powd., dms lb. .22½- —
Tech., anhyd., bgs., c.l., divd E, ton. 56.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton. 38.00 - —
bulk, c.l., works ton. 34.00 - —
USP, cryst., fib dms. lb .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald lb. .07¼- —
dms., l.c.l., same basis lb. .08¼- —
Liq., 40-44%, tanks, works, 100% basis ton. 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt. equald lb. .06 - —
dms., l.c.l., same basis lb. .07 - —
Fused, bbls., c.l., works, E., frt. equald lb. .05½- —
bbls., l.c.l., same basis lb. .06½- —
Sodium sulfite, anhyd., tech., bgs., c.l., works 100 lbs. 3.50 - —
bgs., t.l., same basis 100 lbs. 4.00 - —
Powd., bgs., c.l., works 100 lbs. 7.55 - —
bgs., l.c.l., same basis 100 lbs. 7.95 - —
Sodium sulfocyanide, CP (see Sodium thiocyanate).
Sodium tetraborate (see Borax).
Sodium tetrasulfide, liq., 40%, dms., c.l., works, frt. equald lb. .04½- —
dms., l.c.l., same basis lb. .05½- —
Sodium thiocyanate, purified, cryst., 250-lb. dms lb. .90 - —
Tech., anhyd., dms., 1 ton lots or more, works lb. .367 - —
dms., less than ton lots, works lb. .387 - —
Sodium thiosulfate, NF, cryst., bbls. lb. .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 7.75 - —
100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 8.15 - —
Sodium thiosulfate, photograde, 64-lb. bgs., c.l., t.l., frt. equald, lb. .0775- —
64-lb. bgs., l.c.l., t.t.l., frt. equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt. equald 100 lbs. 4.95 - —
100-lb. bgs., l.c.l., t.t.l., frt. equald 100 lbs. 5.20 - —
Sodium titanate, ctns., c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns., 1-ton lots or less, works lb. .14¾- —
Sodium trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E, lb. .35 - —
50-lb. dms., c.l., frt. alld. E lb. .35½- —
10-lb. cns., c.l., frt. alld. E lb. .42 —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c. per pound higher.
Sodium tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.73 - —
bgs., l.c.l., same basis 100 lbs. 8.48 - —
bulk, hopper cars, same basis. 100 lbs. 7.18 - —
Sodium tungstate, tech., kgs., divd. E lb. 1.32 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb. .52 - —
Sodium-carboxymethyl cellulose (see CMC).
Sodium-cinchophen (see Cinchophen-sodium).
Sodium formaldehyde sulfoxylate, dms., t.l., divd lb. 22½- —
dms., l.t.l., same basis lb. .23 - —
Sodium-zirconyl sulfate, fib dms., 1,000-lb. lots or more, works lb. .28 - —
fib. dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high-flash, tanks, frt equald gal. .30 - .35½
Petroleum, straight, aromatic, 310°-360°F. b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York gal. .29 - —
Houston, Texas gal. .29 - —
355°-420°F. b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York, gal. .30 - —
Houston, Texas gal. .30 - —
Solvent naphtha, partial aromatic, 211°-265°F b.r., 31°C m.a.p., tankcars, New Jersey and New York gal. .235 - —
286°-340°F. b.r., 22°C m.a.p., tankcars, New Jersey and New York gal. .275 - —
319°-380°F. b.r., 27° C. m.a.p., tankcars, New Jersey and New York gal. .27 - —
322°-395°F b.r., 28°C m.a.p., tankcars, New Jersey and New York gal. .28 - —
Sorbitan monostearate, fib dms., 20,000-lb. lots, works lb. .33½- —
10,000 to 20,000-lb. lots, works, lb. .35½- —
fib. dms., smaller lots, works lb. .38½- .40½
Sorbitan tristearate, fib dms., 20,000-lb. lots, works lb. .34 - —
fib. dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib. dms., smaller lots, works lb. .39 - .41
Sorbitol, USP, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. 14¼- —
powd., dms., c.l., works lb. .28½- —
dms., 10,000 to 20,000 lb. lots, works lb. 40½- —
Sorbitol, soln., comL, aqueous, dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27 - —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23¼
Chemically isolated, new process, bgs., c.l., works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .29½
Soybean meal, 44%, bulk, unrestricted, Decatur ton .63 - —
Soybean oil, crude, tanks, Decatur, lb. 10.40 - —
Foots, soapstock acid 95%, tanks, New York lb. .06 - —
Alkali, refd., dms. lb. .1475- .15
tanks lb. .1275- —
Clarified, dms. lb. .1425- .1450
tanks lb. .1225- —
Refd., salad, dms. lb. .14¾- .15
tanks lb. .12¾- —
Soybean oil acids, dbl. dist., dms., lb. .17¼- .18½
tanks lb. .14¾- —
S. D., dms. lb. .16 - .18½
tanks lb. .13½- —
Sparteine sulfate, cns., 100 oz. or more oz. .80 —

"Why the enthusiasm? Because users of new, improved Varsol find that it keeps its long lasting sweetness after numerous processings or long storage periods. A unique hydrofining process, developed by Esso Research, makes possible this major solvent development. Quality controlled Varsol, like all Esso solvents, reaches your plant fresh, uniform and on schedule from modern, conveniently located storage terminals. For further information or expert technical assistance call your Esso Representative or write to us at 15 West 51st St., N.Y. 19, N.Y. (And tell 'em Nosey sent you!)" Nosey

HUMBLE OIL & REFINING COMPANY Esso

Spearmint leaves, dom., bls. lb. .75 - —
Spearmint oil, NF, dms. lb. 3.50 - 3.75
Sperm oil, bleached winter, 45°, dms. lb. .1750- .1850
tanks lb. .1550- —
Nat., winter, 45°, dms. lb. .1650- .1750
tanks lb. .1450- —
Spermaceti wax, blocks, cs. lb. .32 - .33
cakes, cs. lb. .33 - .34
Spruce oil, cns., dms. lb. 2.10 - 2.55
Squill, white, bls. lb. .16 - .18
Powd., bbls., bxs. lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - .20
Stannic chloride, anhyd., dms., works lb. .902 - .904
Stannous chloride, anhyd., dms. lb. 1.123 - 1.378
Stannous chloride, hyd., crystal, 800 lbs. or more lb. 956875- —
Stannous oxide, dms., dlvd. lb. 1.673 - 1.803
Stannous sulfate, works lb. 1.211 - 1.251
Star root (see Helonias root).
Stargrass root (see Aletris root.)
Stavesacre seed, bgs. lb. .60 - .61
Stearic acid, double pressed, bgs. lb. .16¾- .19¼
Single-pressed, bgs. lb. .16¼- .18¾
Triple-pressed, bgs. lb. .18½- .21
Stoddard solvent, petroleum, tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12875- —
Stramonium leaves, bgs. lb. .15 - .20
Streptomycin sulfate, bulk gram. .028 - .03
Strontium bromide, NF, cryst., gran. 150-lb dm., frt. equald lb. 1.00 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .33 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib dms., dlvd. lb. .48 - —
Strontium iodide, jars, 25-lb. lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works. 100 lbs. 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms. lb. 1.83 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works. ton. 56.70 -66.15
Strophanthin G (see Quabain, USP).
Strophanthin K, pots. oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs. lb. 2.50 - 3.00
Styrax gum, USP, cs. lb. 4.50 5.50
Styrene monomer, polymer grade, 99.6%, dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., same basis lb. .19 - —
tanks, frt. equald. lb. .132 - —
Tech., 99.2%, dms., c.l., dlvd. lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, frt. equald lb. .1103- —
Above prices are escalated for each calendar quarter on the basis of cost of benzene in the range of 31c. to 34c. a gallon and petroleum refining labor.
Styralyl acetate, bots lb. 1.03 - 1.10
Succinic acid, purif., cryst., dms., t.l., frt. alld lb. .62 - —
dms., l.t.l., same basis lb. .63 - .75
Succinic anhydride, dms., c.l., t.l., dlvd lb. .51 - —
dms., l.c.l., same basis lb. .52 - —
Sucrose, refd., white, bgs., refy E. lb. .0915- —
Sucrose acetate, isobutyrate, 90%, cns., t.l., dlvd lb. .33½- —
dms., l.t.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
100%, t.l., dms., dlvd. lb. .35½- —
l.t.l., dms., same basis lb. .37 - —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l., works lb. 1.00 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb. ctns., works lb. .60 - .65
80-lb. ctns., spot lb. .65 - .75
Sulfabenzamide, dms. kilo. 8.80 - 9.90
Sulfabenzamide-sodium, dms. kilo. 9.00 -10.10
Sulfacetamide, USP, fib. dms kilo. 6.61 - 6.83
Sulfacetamide-sodium, USP, fib. dms kilo. 8.15 - 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP, powd., dms. kilo. 22.60 -23.70
Sulfadiazine-sodium, USP, dms kilo. 24.80 -25.90
Sulfaguanidine, NF X, dms kilo. 5.50 - 6.60
Sulfamerazine, USP, microcrystals, dms kilo. 23.50 - —
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 - 25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 19.65 -20.75
USP XV, powd., dms. kilo. 18.75 -19.85
Sulfamic acid, cryst., dms., c.l., t.l., works 100 lbs. 16.00 - —
dms., l.c.l., t.l., works 100 lbs. 17.50 - 18.50
Gran., dms., c.l., t.l., works. 100 lbs. 14.75 - —
dms., l.c.l., t.l., works 100 lbs. 16.25 -17.25
Sulfanilamide, NF, reg., 1,000 lb., fib. dms., frt. equald lb. 1.75 - —
NF, reg., smaller lots, fib. dms., frt. equald lb. 1.80 - —
Sulfanilamide quinoxaline, veterinary, dms kilo. 16.28 - —
Sulfanilic acid, tech., dms., c.l., frt. alld lb. .21 - —
dms., l.c.l., frt. alld lb. .23 - —
Sulfapyridine, USP XV, powd., bots., tins kilo. 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo. 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms. kilo. 6.25 - 6.90
NF X, powd., dms. kilo. 5.50 - 6.15
Sulfathiazole-sodium, NF X, dms., 1,000-lb. lots or more lb. 2.35 - —
Sulfur, comi., flour, bgs., mines. 100 lbs. 2.35 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.25 - —
bbls., mines 100 lbs. 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton. 23.50 - —
export, f.o.b. vessels, Gulf ports. long-ton. 25.00 - —
US and Canada, f.o.b. vessels Gulf ports long-ton. 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower.
Sulfur, crude, imp., Mexican, bulk, filtered, f.o.b., vessel, Coatzacoalcos long-ton. 24.00 - —
Mexican dark sulfur price is $1 per long-ton lower.
Sulfur, refd., flowers, NF, bgs., mines 100 lbs. 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines 100 lbs. 6.25 - —
Sulfur, refd., lump, bgs., mines 100 lbs. 4.25 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, comi., reg., bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 3.70 - —
99-100%, pashing through mesh, bgs., mines 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.80 - —

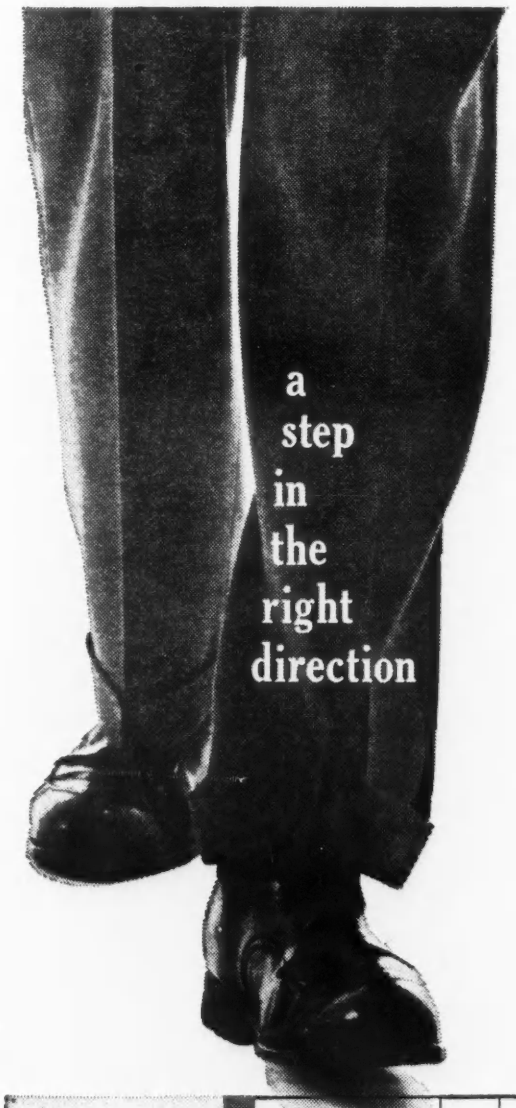
Sulfur, refd., bgs., mines 100 lbs. 4.90 - —
bbls., mines 100 lbs. 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 4.00 - —
Sulfur dichloride, ret. dms., c.l., works, frt. equald lb. .05½- —
ret. dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfur dioxide, liq., comi., cyls., works, frt. equald lb. .10 - .13
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms., c.l., frt. equald lb. .05½- —
dms., l.c.l., same basis lb. .06¾- —
tanks, same basis lb. .04½- —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
cbys., l.c.l., works 100 lbs. 2.30 - —
tanks, works ton. 18.60 - —
66°Be, cbys., c.l., works 100 lbs. 2.25 - —
cbys., l.c.l., works 100 lbs. 2.55 - 3.35
tanks, works ton. 22.35 - —
98%, tanks, works, East ton. 23.50 - —
99%, tanks, works, East ton. 23.70 - —
100%, tanks, works, East ton. 23.95 - —
Sulfuric acid, California works, tanks ton. 26.45 - —
CP, NF, consumers' cbys., c.l., frt. equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
Sulfuric acid, CP, NF, 5-pt. bots., extra, cs., c.l., works, frt. alld. lb. .16¼- —
5-pt. bots., extra, cs., l.c.l., same basis lb. .17¾- .18¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton. 25.00 - —
40%, tanks, works ton. 29.00 - —
65%, tanks works ton. 39.50 - —

Superphosphate, run-of-pile under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
Superphosphate, triple, 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla., unit-ton. 1.00 - —
bulk, f.o.b. vessel at Fla unit-ton. 1.05 - —
Sweet birch oil, USP, northern, cns lb. 4.00 - 9.50
USP, southern, cns lb. 2.00 3.05

T

2,4,5-T, dms., c.l., works, frt. equald. lb. 1.18 - —
dms., l.c.l., same basis lb. 1.23 - —
2,4,5-T, isopropyl ester, dms., c.l., works, frt. equald lb. 1.24 - —
dms., l.c.l., works lb. 1.29 - —
Talc, dom., fibrous, grd., bgs., c.l., works, New York ton. 28.00 - —
bgs., l.c.l., works ton. 31.00 -36.00
Talc, dom., 99.5%, 325 mesh, bgs., c.l., works, New York ton. 31.00 - —
bgs., l.c.l., works ton. 34.00 - —
99.95X, 400 mesh, micronized, bgs., c.l. works ton. 38.00 - —
625 mesh, micronized, bgs., c.l., works ton. 80.00 - —
Dom., ord., Calif., grd., bgs., c.l., works ton. 34.00 -39.50

Talc, dom., ord. Vermont, off-color, grd., bgs., c.l., works ton. 19.40 - —
bgs., l.c.l., works ton. 37.00 - —
Imp., Canadian, grd., bgs., c.l., mines ton. 20.00 35.00
tanks, works lb. .02⅞- .03⅛
Tall oil, crude, tanks, works lb. .03¼- .03¼
Acid, refined, dms., c.l., works lb. .08¾- .10
tanks, works lb. .07½- .08¾
Dist., depending on grade, dms., c.l., works lb. .08¾- .09¾
tanks, works lb. .07½- .08½
Tall oil fatty acids, less 2% rosin acid, dms., c.l., works lb. .09¾- .11
tanks, works lb. .07¾- .09
2-6% rosin acid, dms., c.l., works. lb. .08½- .09
tanks, works lb. .06½- .07
Tallow, edible, tanks, dlvd. lb. .08⅜- —
Inedible, fancy, bleachable, tanks, lb. .05¾- —
fancy, guarant'd, bulk, f.o.b., steamer lb. .06¾- —
dms., f.a.s. lb. .0740- —
tanks, dlvd. lb. .05⅞- .06
No. 1, dlvd. lb. .05⅛- —
Prime, tanks, dlvd lb. .05½- —
special, tanks, dlvd lb. .05⅜- —
Sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50%, bbls., l.c.l. lb. .10½- .11
Tallow acids, dist., dms. lb. .13¼- .15¾
tanks lb. .10¾- —
Hydrogenated, dms. lb. .15½- .16



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sc aromatic solvents

You move a significant step ahead of competition with high solvency SC Aromatic Solvents. Among many desirable properties, they offer a wide variation in dry times and solvencies which give them unusual versatility in your formulations. Uniformity from initial test to production is absolutely assured because SC Aromatic Solvents always start with the identical crude. Each run is carefully inspected through numerous quality-control check points until final delivery to your plant. Call today for specific recommendations—SC Aromatic Solvents are available for immediate delivery from 21 Solvents and Chemicals Group plants and stock points in quantities to meet all your requirements.

properties of SC aromatic solvents

PRODUCT	Initial °F.	Dry °F.	Dry °C.	Flash Point °F. (Closed Cup)	Speed Evap. Min.	Kauri Butanol Value	Aniline Point °F.	Specific Gravity @ 60°F.	Lbs. Per Gal. @ 60°F.	Aromatic Equivalent Content
SC Solvent #1	211	240	116	30	2.5	86.4	+ 1	.8259	6.88	74%
SC Solvent #1-A	202	235	113	25	2.5	67	+48	.8003	6.66	52%
SC Solvent #2	270	308	153	81	14.0	80	— 2	.8418	7.01	76%
SC Solvent #2-B	277	370	188	81	21.5	75	+12	.8388	6.99	68%
SC Solvent #3	356	400	204	135	64.0	72	+24	.872	7.26	69%
SC Solvent #28	329	379	193	122	51.0	73	+14	.8597	7.16	74%
SC Solvent #100	321	351	177	115	21.0	93.2	—37	.8708	7.25	96%
SC Solvent #150	369	412*	211*	152	98.0	91.8	—26	.8899	7.41	96%
SC Solvent #450	450	588*	309*	212	750	73	+10	.9279	7.73	

*End Point

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Tallow Oil—Trichloroacetic Acid

Tallow oil, acidless, dms., c.l. lb. .14 - —
dms., l.c.l. lb. .16 - —
tanks lb. .12½- —
Tangerine oil, Florida, dms. lb. 4.25 - —
Tankage, animal, feeding, 9-11% ammonia New York bulk, unit-ton. 4.75 5.00
Tannic acid NF fluffy, bbls., 1,000-lb lots lb 2.05 —
bbls, smaller lots lb 2.06 2.07
powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls smaller lots lb 1.96 1.99
Tech., dms lb 1.05 —
Tansy oil, dms lb. 6.60 8.00
Tar acid oil, 15-18%, dms., c.l., dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. 43½- —
25-28% dms., c.l., frt. equald basis gal. .53½- —
dms., l.c.l. same basis gal. .60 - —
tanks same basis gal. .62 - —
50-53% dms. c.l., same basis gal. .50 - —
dms., l.c.l. same basis gal. .75 - —
tanks same basis gal. .77 - —
Tar coal (see Coaltar).
Tartar emetic (see Antimony potassium tartrate).
Tartaric acid NF 100-lb bgs., c.l., frt. equald lb. .41 - —
bgs. 10,000 lbs. 1 shipt., same basis lb. .43 - —
bgs., smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb. fib. dms lb. .70 - —
Terpineol, extra, dms lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, cns., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.65 - 1.70
Testosterone, USP, bots. gram. No prices.
Testosterone propionate, USP, bots. gram. No prices.
Tetrachloroethane, dms., works lb. .14½- —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms. l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., divd. E lb. .65 - —
dms., l.c.l., divd. E lb. .66½- —
Tetraethyl pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., divd. E lb. .53½- —
dms., l.c.l., divd. E lb. .55 - —
tanks, divd. E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt. alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .25½- —
dms., l.c.l., Memphis, Tenn. lb. .26½- —
dms., c.l., t.l., Newark, N.J. lb. .27½- —
Tetrahydrofurfuryl alcohol, dms., l.c.l., Newark, N. J. lb. .28½- —
tanks, divd. E. of Denver lb. .25 - —
tanks, divd. W. of Denver lb. .26 - —
Tetrahydrophthalic anhydride, dms., c.l., t.l., frt. alld. E lb. .39 - —
l.c.l., l.t.l., same basis lb. .41 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, divd lb. 7.50 -10.00
Thallium sulfate, 99%, bots., divd. lb. 5.00 -10.00
Theobromine, NF, fib dms., 100-lbs., f.o.b., works lb. 4.10 - 4.18
Theobromine and sodium acetate, USP, fib dms., 500-lbs. works lb. 6.45 - —
Theobromine, sodio-salicylate, NF, fib. dms., 500-lbs., works, lb. 3.80 - —
Theophyline, USP, anhyd., 100-lb. dms., frt alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 27.00 - —
Thiamine mononitrate, USP, fib. dms., frt. alld kilo. 27.00 - —
Thiocarbanilide, dms., ton lots lb. .74 - —
dms., less ton lots lb. .76 - —
Thiodiphenylamine (see Phenothiazine).
Thioflavin green toner, brilliant, molybdated, PMA, kgs., works lb. 5.20 - —
Tungstated, PTMA, kgs., works lb. 6.20 - —
Thioglycolic acid, refd., 55 gal. dms., ton lots, 100% basis lb. 1.15 - —
Thiosalicylic acid, 80%, dms., 1,000-lb., lots, works lb. 4.00 - —
Thiourea, tech., bgs., t.l., divd. Metropolitan area lb. .28½- —
bgs., ton lots, same basis lb. .31½- —
bgs., less than ton lots, same basis lb. .32½- —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.80 - —
dl-Threonine, dms., 25 kilos, works, kilo. 115.00 - —
Thyme leaves, French, triple sifted extra, bgs. lb. .25 - —
Spanish, extra, bgs. lb. .14 - —
reg., bgs. lb. .08 - —
Thyme oil, NF, red, cns., dms. lb. 3.25 - 3.60
NF, white, cns. lb. 3.50 - 3.95
Tech., white, cns. lb. .80 - 1.10
Thymol, fib. dms., 25-lbs., f.o.b. works lb. 2.45 - —
Thymol iodide, NF, dms., 100-lbs. f.o.b. works lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous).
Tin metal (Straits) lb. 1.21⅜- —
Tin oxide (see Stannic oxide).
Tin sulfate (see Stannous sulfate).
Tin tetrachloride, anhyd. (see Stannic chloride, anhyd.).
Titanium dioxide, anatase, all grades, bgs., 30-ton c.l. min. frt. alld. lb. .25 - —
20-ton, c.l., same basis lb. .25½- —
bgs., l.c.l., same basis lb. .26 - .26½
rutile, all grades, bgs., 30-ton c.l. min., frt. alld. lb. .27 - —
20-ton, c.l., same basis lb. .27½- —
bgs., l.c.l., same basis lb. .28 - .28½
Titanium dioxide, metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla. ton. 180.00 - —
bgs., 5-ton lots, Niagara Falls, N.Y. ton. 205.00 - —
bgs., ton lots, same basis ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher
Titanium dioxide-calcium pigment, 30% Ti O_2, reg. bgs., 30-ton c.l., f.o.b lb. .09⅛- —
20-ton, c.l., works lb. .09⅜- —
bgs., l.c.l., works lb. .09⅞- —
50% Ti O_2, high-tinting, dms., 30-ton c.l lb. .14⅛- —
20-ton, c.l., works lb. .14⅜- —
dms., l.c.l. lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 —
Tobias acid, dms., c.l., t.l., 20,000 min., f.o.b. plant, frt. alld E lb. .81 - —
dms., l.c.l., l.t.l., 5,000-lbs.-19,999 lbs., same basis lb. .81½- —
dms., l.c.l., l.t.l., less than 5,000 lbs., same basis lb. .84 - —
For west coast delivery add 2c. per lb.
d-a-Tocopherols, NF, mixer, conc. pure basis, bots. kilo. 50.30 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 91.80 - —
d-a-Tocopheryl acid succinate, cryst., bots. kilo. 81.70 - —
dl-a-Tocopherol, bots. kilo. 74.25 -100.00
dl-a-Tocophheryl acetate, bots. kilo. 67.50 -91.00
25% dry, powd., bots. kilo. 16.88 -18.38
33⅓% dry, powd., bots. kilo. 22.50 -24.60
o-Tolidine base, dry, kgs., 100% basis lb 1.55 —
Paste, kgs., 100% basis lb 1.50 —

TOLUOL
Toluol quotations, both coaltar and petroleum, may be found under Toluene.

Tolu balsam, cns. lb. 4.00 - 4.50
Toluene, coaltar, indust., or nitration, tanks, divd. E. of Rockies gal. .25 - .25½
Petroleum, indust., tanks, divd gal. .25 - .25½
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, 55-gal. dms., t.l., frt. alld lb. .16 - —
1,000-lb. or more, same basis lb. .18 - —
less than 1,000-lb., same basis lb. .23 - —
tanks, same basis lb. .14 - —
Toluenesulfonic acid in 10-gal. dms., 2c. per lb. more.
p-Toluenesulfonic acid mononydrate, dms., c.l., or t.l lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt. alld lb. .83 - —
dms., l.c.l., same basis lb. .84 - —
tanks, same basis lb. .82 - —
o-Toluidine, dms., c.l., works, frt. alld lb. .27 - —
dms., l.c.l., same basis lb. .28 - —
tanks, same basis lb. .26 - —
p-Toluidine, tech., flake, dms., frt. alld lb. .50 - —
Cast, dms., frt. alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt. alld lb. 1.10 - —
Tonka beans, Angostura, prime f.o.b., N.Y. lb. 1.35 - 1.50
Brazilian, Surinam, cs., same basis lb. 1.00 - 1.10
Totaquine, 100-oz. lots, cns. oz. .42 - —
Toxaphene, dms., c.l., t.l., works. lb. .22 - —
dms., l.c.l., l.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 4.10 4.20
No. 2, cs. lb. 3.75 3.80
No. 3, cs. lb. 3.40 3.65
USP, powd., bbls. lb 1.05 1.15
Triacetin, dms., c.l., divd. E. of Rockies lb. .38 —
dms., l.c.l., same basis lb. .39½- —
tanks, same basis lb. .35½- —
Triallylamine, dms., c.l., divd lb. .985 - —
dms., l.c.l., divd. lb. .995 - —
tanks, divd. lb. .96 - —
Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver. lb. .41 - —
non-ret. dms., l.c.l., same basis lb. .43 - —
tanks, same basis lb. .38½- —
Tributyl phosphate, dms., c.l., works. lb. .52½- —
dms, l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 - —
Tributylamine dms., c.l., works lb. .67½- —
dms., l.c.l., same basis lb. .69 - —
tanks, same basis lb. .65 - —
Tributyrin, dms. l.c.l. divd. lb. .69 - —
Trichloroacetic acid, tech., 300-lb. dms. c.l., f.o.b works lb. .52 - —
USP, 100-lb. dms., frt. equald lb. 1.25 - —

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For complete details on the type that suits the products you now make or plan to make in the future, consult our Technical Service Department. Titanium Pigment Corporation, 111 Broadway, New York 6, New York; offices and warehouses in principal cities. In Canada: Canadian Titanium Pigments, Ltd., Montreal.

S417-A

TITANIUM PIGMENT CORPORATION
SUBSIDIARY OF NATIONAL LEAD COMPANY

Trichlorobenzene, dms., c.l., frt. alld. E lb. .18 - —
dms., t.c.l., frt. alld. E. lb. .16 - —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices in the West 1¾c. higher.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., t.c.l., dlvd. lb. .16 - —
tanks, dlvd lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works lb. .15½- —
dms., t.c.l., works lb. .16¼- —
tanks, works lb. .13½- —
Trichloroethylene dms., c.l., or t.l., dlvd lb. .13½- —
dms., t.c.l., dlvd. lb. .14¾- .15¼
tanks, dlvd. lb. .12 - —
Trichloroisocyanuric acid dms., c.l., t.l., frt. equald lb. .65 - —
dms., t.c.l. same basis lb. .75 - —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., non-ret. dms., 1 dm., frt. equald kilo. 3.10 - —
Trieresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
dms., t.c.l., dlvd. lb. .36 - —
tanks dlvd lb. .32½- —
Petroleum, dms., c.l., dlvd lb. .35 - —
dms., t.c.l. dlvd lb. .36 - —
tanks, dlvd lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .22½- —
dms., t.c.l., dlvd, E lb. .24 - —
tanks, dlvd. E lb. .20 - —
Triethanolamine, dms., c.l., dlvd. E. lb. .24½- —
dms., t.c.l., same basis lb. .26 - —
tanks, same basis lb. .22 - —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., t.t.l. frt. alld. lb. .26½- —
tanks, frt alld lb. .24½- —
Triethylamine dms. c.l., dlvd E. lb. .50 — —
dms., t.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .44½- —
non-ret, dms., t.c.l., same basis lb. .46½- —
tanks, frt alld. E. of Denver, lb. .42 - —
Triethyl phosphate, dms., c.l., dlvd, lb. .40½- —
dms., t.c.l., dlvd. lb. .42 - —
tanks, dlvd. lb. .38 - —
Triethylene glycol, dms., c.l., dlvd, E lb. .21 - —
dms., t.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
HP, tanks, dlvd. E. lb. .20 - —
Triethylenetetramine dms., c.l., dlvd. E lb. .48½- .48¾
dms., t.c.l., same basis lb. .50 - .50¼
tanks, same basis lb. .46 - —
Triisobutylene, tanks, dlvd. lb. .08 - —
Triisopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., t.c.l., dlvd. E. lb. .24¾- —
tanks, dlvd. E lb. .20¾- —
Trimethylamine, anhyd., cyls., t.c.l., frt. equald, 100% basis lb. .30 - .305
tanks frt equald. 100% basis, lb. .26 - —
25-40% soln., dms., c.l., frt. equald, 100% basis lb. .35½- —
dms., t.c.l., frt. equald, 100% basis lb. .35½- —
tanks, 100% basis, frt. equald lb. .26 - —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .30½- —
dms., t.c.l., t.t.l., same basis lb. .31½- —
Trioxanes, pure, dms., c.l., t.l., works lb. .50 - —
dms., t.c.l., works lb. .51½- —
Tripentaerythritol, ogs., c.l., t.l., dlvd. E lb. .34 - —
bgs., t.c.l., t.t.l., dlvd. E lb. .35 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .41½- —
bbls. t.c.l. frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 - —
Tripropylene, dms., c.l., dlvd. E gal. .44 - —
dms., t.c.l., same basis gal. .54 - —
tanks, same basis gal. .28 - —
Tripropylene glycol, dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., t.c.l. t.t.l. frt. alld. E lb. .22 - —
tankcars and compartmented tankcars, frt. alld. E lb. .17½- —
tankwagon and compartmented, tankwagon, 1,000 gals., min. frt. alld. E lb. .18 - —
Tripropylene glycol prices 1c. per lb. higher in west.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, dms., 1 kilo, works. kilo.154.00 - —
Tung oil, dms., New York lb. .31 - .31½
tanks, imported lb. .29 - .29½
tanks, domestic mills lb. .28 Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms. works lb. 4.25 - —
Tungstic acid tech. dms., 1,000-lb. lots, works lb. 2.25 - —
dms., smaller lots, works lb. 2.45 - —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil NF, cns. dms lb. .28 .50
Tyrothricin, USP, 1 to 5 kilos gram. .50 - —

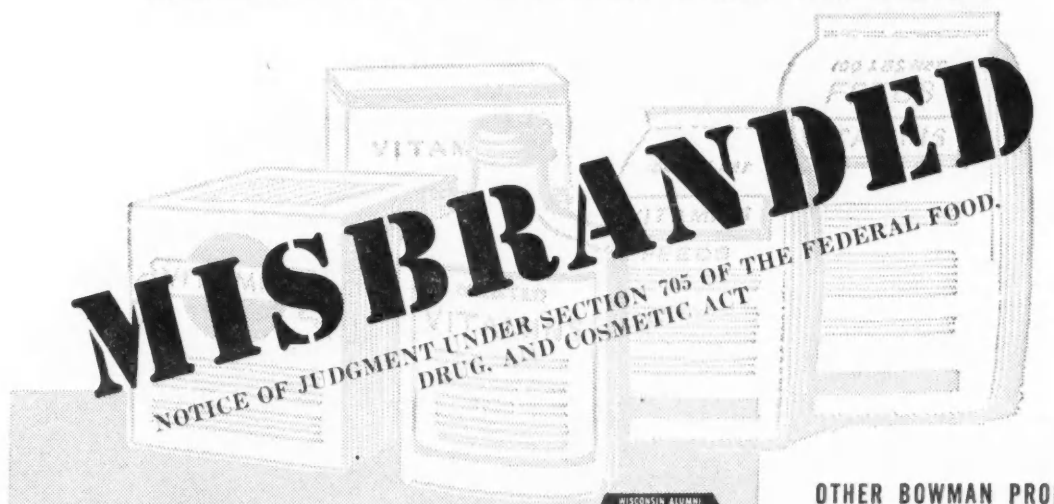
U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .33½- .38
Jobbing types, dry, bbls., same basis lb. .18 - .19
Regular types, dry bbls., same basis lb. .25 - .40½
Ultramarine blue prices 1c higher W. of Rockies.
Umber pigment, burnt, American, dom. bgs., t.c.l., works lb. .08½- —
Raw, Amer., dom. bgs., t.c.l., works lb. .08½- —
Undecylenic acid 55-gal dms., f.o.b. works lb. 1.28 - —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea 46% N indust. bgs., c.l., t.l., f.o.b. plant ton.100.00 - —
Urea, feed grade, c.l., t.l., f.o.b. plant ton.95.00 - —
45% N, agricultural, bgs., c.l. f.o.b. plant ton.91.25 - —
Bulk, c.l., t.l., same basis ton.85.25 - —
Urea-ammonia liquor A, B, C & F grades, N basis, tanks, frt. equald ton.120.00 - —
37 grade, tanks, same basis ton.145.00 - —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 - —
dms., t.t.l., same basis lb. .70 - —
Uva-Ursi leaves, bls. lb. .14 - .15

V

Valerian root, Belgian bgs. lb. .32 - —
Indian, bgs. lb. .25 - —
dl-Valine, dms. 1 kilo, works kilo.37.00 - —
Vanadium pentoxide, tech., dms. works lb. 1.38 - —
Vandyke brown, bbls., l.c.l., works lb. .11 - —
Vanilla beans, Bourbon, tins lb. 6.40 - 6.65
Mexican cuts, tins lb. 7.85 - 8.25
whole, tins lb. 8.75 - 9.25
Vanillin ex lignin, 100-lb. fib. dms., 2,000-lb. lots or more lb. 3.00 - —
less than 2,000 lbs. lb. 3.20 - 3.30
Venetian red, jobbing, bgs., works. lb. .0525- —
Venetian red, 20%, bgs., works lb. .0575- —
25%, bgs., works lb. .0625- —
30%, bgs., works lb. .0650- —
35%, bgs., works lb. .0675- —
40%, bgs., works lb. .0725- —
Vetiver oil, Bourbon, cns lb.17.00 -17.25
Haitian, cns. lb.10.00 -12.00
Victoria blue toner, molyhdated, PMA 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 4.95
Tungstated, PTMA, 250-lb bbls., same basis lb. 5.55 - —
Victoria blue toner, bbls. prices 1c. higher W of Rockies
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .1810- —
55-gal dms., l.c.l., dlvd lb. .1960- —
tanks, dlvd. lb. .1560- —
tanktrucks less than 4,000 gal., dlvd lb. .1610- —
Vinyl n-butyl ether, tech. dms., l.c.l., works lb. .50 - —
Vinyl chloride monomer, tanks, works, min. frt. equald E. lb. .08 - —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot 1.12 - —
bots., 75cc., hospitals bot 1.56 - —
Vinyl ethyl ether tech. dms., c.l., works lb. .30¼- —
dms., t.c.l., works lb. .31 - —
tanks, works lb. .28¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. 49 - —
dms., t.c.l., same basis lb. 50 - —
tanks, same basis lb. .47 - —
Vinyl trichloride (see Trichloroethane)
2-Vinylpyridine, 10 dms. to tanks, works lb 1.20 - —
1 to 9 dms., works lb 1.35 - —
tanks, works lb 1.15 - —
Vinyltoluene, dms., c.l., f.o.b., dest. frt. paid, Zone 1 lb. .16½- —
dms., t.c.l., same basis lb. .18½- —
tanks, same basis lb. .14 - —
Zone 2 prices are 1c. per lb. higher.
Zone 1 is East of Rockies. Zone 2 is West of Rockies.
Viosterol in oat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units 1,000,000 units .02½- —
Virginia type red, bbls. works lb 1.40 - —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo.47.50 - —
325,000 units per gram, same basis kilo.30.88 - —
250,000 units per gram, same basis kilo.23.75 - —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher
Vitamin A, liq in oil, 1,000,000 A units per gram 1,000,000 units. .07 - —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .07 - —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin) 1-50 grams vials, tins gram 45.00 —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on resin 100 and 500-gram bots. 1-5 kilo dms gram .57 - —
Vitamin B_{12}, oral grade solids in containers of 1 and 10 gram of B_{12} activity gram.52.00 - —
0.1% trituration of cryst. B_{12} with dicalcium phosphate or mannitol 1-10 kilo.52.00 —
Vitamin B_{12}, 0.1% trituration of cyanocobalamin, USP, with dicalcium phosphate or mannitol gm.52.00 - —
USP solution of cyanocobalamin (5,000 micrograms per cc.), 5-gram bots gram.52.00 - —
Vitamin B_{12}, 0.1% vitamin B_{12}, USP, adsorbed on gelatin 100 and 500-gram bots on 1-5 kilo. dms. gram. .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate, NF adsorbed on resin 500-gram bots. 1-5 kilo dms. frt alld gram .57 - —
Vitamin B_{12}, 0.1% cobalamin concentrate in gelatin, 1-10 kilo. dms., frt. alld gram. .57 - —

DON'T LET THIS HAPPEN TO YOU!



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Vitamin C (see Ascorbic acid).
Vitamin D_2 (see Codliver and Fishliver oils, Calciferol and Viosterol).
Vitamin D, dry, 850,000 units per gram kilo lots kilo 42.50 - —
850,000 units per gram less than kilo lots kilo 45.00 —
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Vitamin K, active (see Menadione).
Vitamin K_1, 25-gram lots ... gram. 4.50 - —
Violet methyl toner (see Methyl violet toner).
VM&P naphtha (see Naphtha, VM&P petroleum).

W

Wahoo root bark, bls ..... lb. 2.10 - —
Warfarin, 0.5% dms., 50-lb. lots, dlvd lb. 1.95 - —
dms., 25-49-lb lots, New York or Chicago lb 2.05 - —
Warfarin, 0.51%, dms., 5-24-lb lots, New York or Chicago .lb. 2.15 - —
Watchung-type reds, bbls ... lb. 1.95 - —

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal. dms. ..gal. 12.29 - —
White lead (see Lead, white).
White mineral oil (see Mineral oil, white).
White pine bark, rossed, bls. lb .21 - .22
White precipitate, USP, powd., dms., 100 lbs. f.o.b works lb. 5.50 - —
Whiting (see Calcium carbonate).
Wild cherry bark, thin, nat., bls lb. .22 - —
Wintergreen oil, USP nat. northern, cns lb. 6.35 - 17.50
USP, nat. southern cns lb 3.73 - 7.00
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls ..... lb. .20 - .25
Witch hazel leaves, bls. ..... lb. .35 - .40
Wollastonite fine paint grade, bgs., c.l., works ton 41.00 - —
bgs., l.c.l., ex whse ton 51.00 - —
medium paint grade, bgs., c.l., works ton 29.00 - —
bgs., l.c.l., ex whse. ton 39.00 - —
Wood alcohol (see Methanol).
Wood oil (see Tung oil).
Woolfat crude (see Degras).
Woolfat, USP (see Lanolin).
Wormseed, Levant bgs lb 2.50 - —
Wormseed oil (see Chenopodium oil NF).
Wormwood oil, cns .....lb. 4.75 - —

X

Xylene, coaltar, indust., tanks, works:
Bethlehem, Pa. ..... gal. .29 - —
Birmingham dist. ..... gal. .29 - —
Chicago dist. ..... gal. .28½- —
Xylene, coaltar, ind., tanks, works:
Cleveland dist. ..... gal. .29 - —
Geneva, Utah ..... gal. .29 - —
Johnstown, Pa. ..... gal. .29 - —
Lackawanna, N.Y. ..... gal. .29½- —
Lone Star, Tex. ..... gal. .27 - —
Lorain, Ohio ..... gal. .29 - —
Middletown, Ohio ..... gal. .30 - —
Minnequa, Col. ..... gal. .29 - —
Philadelphia dist. ..... gal. .29 - —
Pittsburgh dist. ..... gal. .29 - —
Sparrows Point, Md. ... gal. .29 - —
Syracuse ..... gal. .29 - —
Terre Haute, Ind. ..... gal .29 - —
Youngstown, Ohio ..... gal. .29 - —
Xylene, petroleum, indust., tanks, works:
Bayonne, N. J ..... gal. .29 - —
Baytown, Tex. ..... gal. .27 - —
Charleston, S. C. ..... gal. .29 - —
Chicago, Ill ..... gal. .28½- —
Detroit, Mich., dlvd.... gal. .27½- —
Houston, Tex. ..... gal. .27 - —
Philadelphia, Pa. ..... gal. .29 - —
Providence, R. I. ..... gal. .30 - —
Sewell's Point, Va. .... gal. .28 - —
Wood River, Ill ..... gal. .28½- —
m-Xylene, 95%, dms., c.l., f.o.b., Richmond, Calif lb. .21 - —
dms., t.c.l. f.o.b., Richmond, Calif lb. .22 - —
tanks, frt. alld. ..... lb. .19 - —
o-Xylene, dms., c.l., works ..... lb. .08 - —
dms., t.c.l., works ..... lb. .09 - —
tanks, works ..... lb. .06 - .06½
p-Xylene, dms., c.l., works ..... lb. .20 - —
dms., t.c.l., works ..... lb. .21 - —
tanks, frt alld ..... lb. .16½- —
Xylenol, cryst., 45°-47°C., m.p., dms., t.c.l., works, frt. equald lb. .23 - —
56°-58°C., m.p., dms., t.c.l., works, frt. equald lb. .33 - —
60°-62°C., m.p., dms., t.c.l., same basis lb. .40 - —
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis gal. 1.38 - —
dms., t.c.l., same basis gal. 1.30 - —
tanks, same basis ..... gal. 1.03 - —
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis, gal. 1.25 - —
dms., t.c.l., same basis .gal. 1.40 - —
2,4-Xylidine, tech., dms., frt. alld, lb. 1.15 - —
2,5-Xylidine, tech., dms., frt. alld, lb. 1.20 - —
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works lb. .39 - —
dms., t.c.l., same basis ..... lb. .40 - —
tanks, same basis ..... lb. .38 - —

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns. ..... lb. 2.15 - 3.05
Yeast, brewers, debittered, USP XV, Saccharomyces dlvd lb. .27 - —
Yeast, primary, USP XV, 150 mcg. B_1 per gram, 100-lb. dms lb. .47 - —
270 mcg., B_1 per gram, 100-lb. dms lb. .52 - —
300 mcg., B_1, per gram, 100-lb. dms lb. .56 - —
900 mcg. B_1 per gram, 199-lb. dms lb. .60 - —
Torula, USP dlvd. lb. .18 - —

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow

Yerba santa leaves, bls. ..... lb. .40 .45
Ylang Ylang oil, Bourbon, bots lb. 7.00 - 22.00
extra, bots lb. 24.00 - 33.00
Yohimbine hydrochloride, bots., tins, oz. 3.75 4.25

Z

Zein, 50-lb. bgs., c.l., t.l., f.o.b. works lb. .37 - —
50-lb. bgs., smaller lots, f.o.b. works lb. .41 - .44
Zinc acetate, NF, VIII, dms lb. .53 - —
Tech., dms., t.l.l., works .. lb. .29 - 30 - —
Zinc borate, bgs., 1,000 lbs or more, works lb. .25 - —
bgs., less than 1,000 lbs., same basis lb. .27 - —
Zinc chloride, NF, gran., dms lb. .42 - —
NF, precip., powd., dms lb. .26 - —
Tech., soln. 50%, dms., c.l., works 100 lbs. 5.80 - —
dms., t.c.l., works 100 lbs 6.40 - —
tanks, works 100 lbs. 5.15 - —
Zinc chloride, tech., fused, dms., c.l., works 100 lbs. 10.70 - —
dms., t.c.l., works 100lbs. 11.20 - —
Tech. gran., fib. dms., c.l., works 100 lbs. 11.45 - —
fib. dms. t.c.l. works 100 lbs. 11.95 - —
Zinc chromate bbls., dlvd. ... lb. .29 - —
Basic bbls., dlvd. lb. .34 - —
Zinc cyanide, dms., 1,000-lb. lots or more, works lb. .53 - —
dms., smaller lots, works ... lb. .57 - —
Zinc dust, pigment, bbls., c.l., Works lb. .16 - —
bbls., l.c.l., works ..... lb. .17¼- —
Zinc fluoride, bbls., works .... lb. .49 - .50
Zinc hydrosulfite, dms., c.l., frt. alld lb. .21½- —
dms., t.c.l., frt. alld. lb. .23½- —
Zinc metal, prime western, slabs, E. St. Louis lb. .12 - —
Prime western slabs, New York, lb. .12½- —
Zinc naphthenate liq. 8% Zn., dms., frt. alld lb. .27 - —
10% Zn., dms., frt. alld. ... lb. .33 - —
Zinc nitrate, tech., flake, 100-lb. fib. dms., l.c.l. ..... lb. .16½- —
300-lb. fib. dms, l.c.l. ..... lb. .14½- —
300-lb. fib. dms., c.l. ..... lb. .14 - —
Zinc oxide pigment, American process, lead-free, bgs., c.l., f.o.b. works lb. .12½- —
bgs., l.c.l., 10 tons or more, same basis lb. .13 - —
bgs., l.c.l., smaller lots, same basis lb. .13½- —
Leaded, 35%, bgs., c.l., mills, same basis lb. .13¼- .14
bgs., l.c.l., 10 tons or more, same basis lb. .13¾- .14¼
Leaded, 50%, bgs., c.l., same same basis lb. .13¾- .14¼
bgs., l.c.l., 10 tons or more, same basis lb. .14¼- .15
Zinc oxide, pigment, French process, green seal, bgs., c.l., f.o.b., works lb. .14¼- —
bgs., l.c.l., 10 tons or more, same basis lb. .14¾- —
bgs., l.c.l, smaller lots, same basis lb .15¼- —
red seal, bgs., c.l., same basis, lb. .14¼- —
bgs., l.c.l., 10 tons or more, same basis lb. .14¾- —
bgs., l.c.l., smaller lots, same basis lb. .15¼- —
white seal, bgs., c.l., same basis lb. .14½- —
bgs., l.c.l., 10 ton or more, same basis lb. .15 - —
bgs., l.c.l., smaller lots, same basis lb. .15½- —
Zinc oxide, USP, 50 lb.-dms., c.l., frt. alld. lb. .15¾- —
50 lb.-dms., l.c.l., 10 tons or more, same basis lb. .16¼- —
50 lb.-dms., l.c.l., smaller lots, same basis lb. .16¾- —
Zinc phenolsulfonate, NF, gran., dms lb. .45 - .46
NF, powd., dms. ..... lb. .48 - .49
Zinc resinate, precip, 7.2-7.6% Zn., dms., frt. alld. lb. .45 - —
Zinc silicofluoride dms. works lb. .15¼- .14
Zinc stearate, USP, ctns., c.l. lb. .41 - —
ctns., t.c.l. ..... lb. .43 - .45
Zinc sulfate, powd., monohydrate, 36% Zn, bgs., c.l., dlvd.E. 100 lbs. 8.00 - —
bgs., l.c.l., dlvd. E. 100 lbs. 9.00 - —
Zinc sulfate in bbls 40c higher.
Zinc undecylenate, 75-lb. fib. dms., f.o.b. works lb. 3.04 - —
Zinc, yellow (see Zinc chromate)
Zinc-ammonium chloride, bgs., c.l., works 100 lbs. 10.25 - —
bbls., c.l., works ..... 100 lbs. 10.85 - —
bbls., l.c.l., works ..... 100 lbs. 11.35 - —
Zinc-formaldehyde sulfoxylate, basic, 300-lb dms., frt. alld lb. .28 - —
Normal, 250-lb. dms., frt. alld lb. .55 - —
bgs., 5 tons to c.l., works lb. .03¾- —

—Continued on page 41

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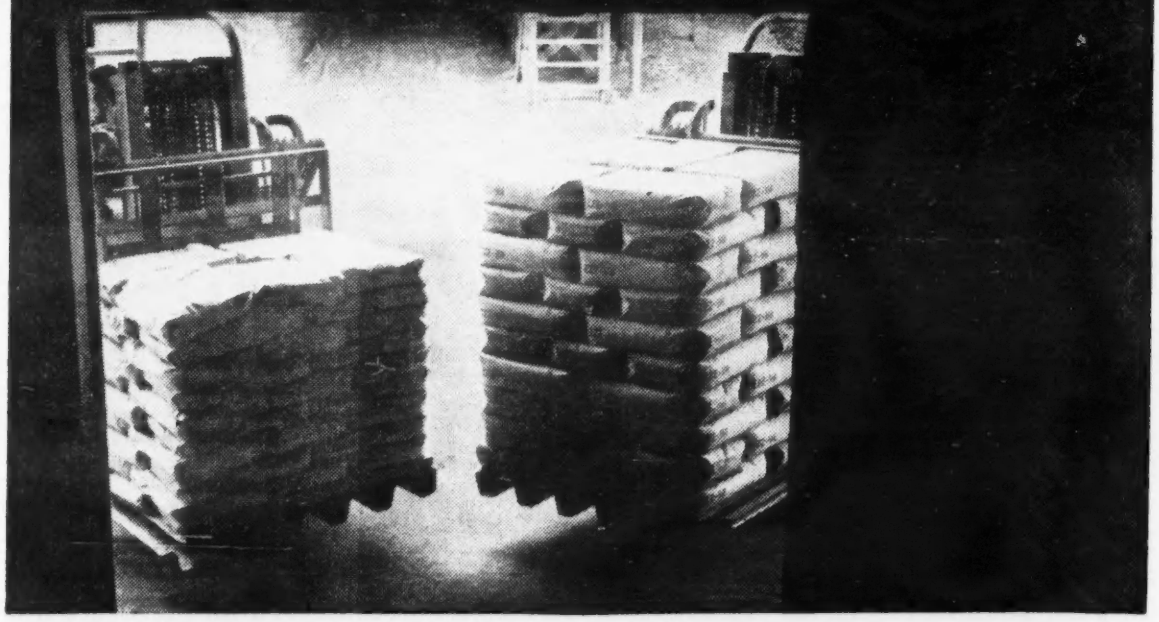
AZODOX high apparent density zinc oxides



You can store AZODOX in much less warehouse space than required by other zinc oxides. Reason is, you get many more pounds of AZODOX per cubic foot of pigment, up to 65 lbs./cu. ft.! And smaller bags handle easier, faster—stack higher safely—reduce breakage losses—are shaped to give close-packed, unitized shipments.

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Aluminum Output Costs Reduced 15 Percent by Refractory Process

Heavy chemical makers, regularly checking the pulse of consuming industry profits, this week see revived hope for healthy aluminum margins—following last month's profit-squeezing 2-cent price cut. Reason: A technological breakthrough which is claimed to cut costs of producing the light metal by 15 percent, as well as permitting inexpensive expansions of capacity. The development, announced in an admittedly sketchy way last week by the big British aluminum maker and a US company, involves use of refractory hard metals in electrolytic reduction cells, replacing the conventional carbon linings.

It's believed that the jointly-developed process will be made available to other aluminum producers by license, in line with normal industry practice.

A statement of policy on licenses, together with further details on the process, is expected after the first of the year.

The process reportedly will not affect consumption of caustic soda, soda ash and other chemicals in aluminum smelting, but will substantially reduce requirements for electricity during the stage when alumina is electrolytically processed into aluminum.

Full details on the process are to be given at the annual meeting of the American Institute of Mining, Metallurgical & Petroleum Engineers in New York next February.

A spokesman for the American company says that eventually the development could result in lower prices of aluminum, but that in the short run it is more likely to restore profit margins, which were badly hit by the 2-cent price cut.

Aluminum represents an important market for three heavy chemicals, as well as for captively-supplied hydrofluoric acid.

According to the latest authoritative estimate, aluminum smelters in 1959 used over 300,000 tons of caustic soda and soda ash combined, valued at about $12 million, and another 200,000 tons of burnt lime, valued at $3 million. Most of this volume is supplied by merchant producers.

Price Trends

Advanced

Silver, 1c. per troy oz.

Reduced

Tin, Straits, ⅝c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
106.65	106.65	106.63	106.88

For Current Prices See Page **11**

Acids

Boric—No conspicuous change in this market. Since consuming firms have been coasting on light inventory all year long, the decline in raw materials sales toward year's end should prove less precipitous than usual, one trade source says.

Sulfuric—Steel output responded to increased demand by scoring one of the sharpest upturns in recent months. Production during the week ended December 2 totaled 2,073,000 net tons, up 41,000 tons over the previous week's 2,032,000 tons, the American Iron & Steel Institute reports.

Production to date in 1961 stands at 88,973,000 tons, down from 93,202,000 tons in the same period of last year.

Bases and Salts

Caustic Soda—Generally steady prices are reported in the trade. Occasional distress lots, resulting from geographic supply imbalance, are moved below list, without affecting overall market prices, it's reported.

Chlorine—With the recession all but officially over, this material is expected to resume its upward climb next year. In the current year, sales will be off slightly owing to recession-hit areas like automotive chemicals, some plastics, and earlier in the year, paper and pulp.

Hydrogen Peroxide—Shipments of hydrogen peroxide in 1960 totaled 26,049 tons, valued at $23 million, the Bureau of Census reports. Comparable figures for 1959 were 27,753 tons (revised) and $25.6 million (revised).

Total production in 1960 was 28,960 tons, compared with 30,408 in 1959 (revised) and 25,834 the year before.

Soda Ash—Movement to the account of glass makers is at seasonally reduced volume, following a booming summer season.

Prices of soda ash remain steady at long-established levels. These quotations are considered unrealistic by trade sources in view of increased costs, but the confined profit position of glass makers has reportedly been one of several factors militating against an advance.

Unless the price of ash strengthens, boosting profit margins, trade sources expect a shortage of the material to develop over the long run owing to an unwillingness of producers to invest in new facilities at present margins.

Sulfur—The market has picked up this quarter, and is reportedly running even with last year's pace, but downturns earlier in the year are expected to result in a reduced volume for 1961 as a whole.

Bad planting weather in the midwest cut into fertilizer sales during the summer months, and earlier, chemical business was spotty owing to recession-inspired inventory cutting.

Paper Production Higher

The American Paper & Pulp Association reported paper production for the week ended Dec. 2 at 93.6 percent of theoretical capacity as compared with the revised figure of 90.5 percent for the previous week and 93.4 percent for the corresponding week of last year.

Nonferrous Metals

Chromium—US consumption of chromite in September dropped 4 percent below August's total, the Bureau of Mines reports. Metallurgical use was down 2 percent, refractory 8 percent and chemical 4 percent.

Chromite consumption of 61,474 short tons included 49,168 tons of metallurgical grade ore, 8,298 tons of chemical grade and 4,008 tons of refractory grade. Production of chemicals from chromite totaled 9,824 tons of sodium bichromate equivalent.

Magnesium—The nation's top magnesium producer says it will resume operations at its number two plant. With a sharp increase in demand making itself felt, production from the number one plant has lately been supplemented by stocks from inventory, which are now dropping to a good working level. Two of eight cell buildings at the second plant have been slated for start-up on January 2.

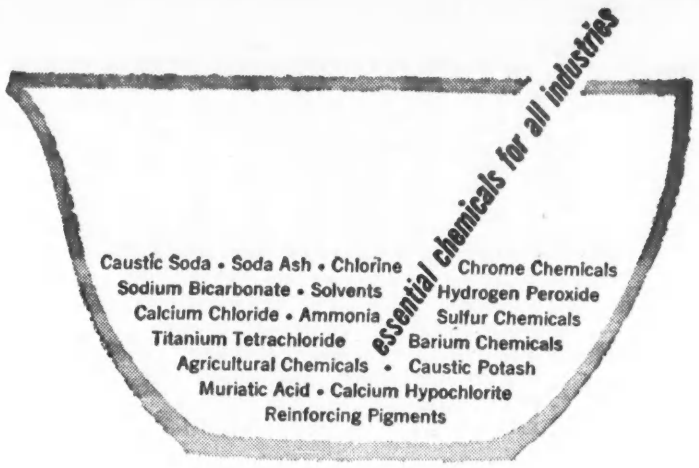
Mercury — Industrial consumption of mercury in the third quarter rose 31 percent to 16,200 flasks, highest since the second quarter of 1959, Bureau of Mines reports.

Consumption for the year through September 30 totaled 42,000 flasks, up sharply from last year's depressed level of 37,000 flasks. Mine production during the third quarter was 7,220 flasks, a decline from the second quarter's 8,700 flasks, Mines notes.

Silver—Price closed Friday at $1.01¾ a troy ounce, up one-cent following the previous week's substantial advance.

Tin—Price of Straits metal moved within a narrow range, closing Friday at $1.21⅜ a pound, ⅝c. lower from a week earlier.

Titanium—Production of titanium mill products in September totaled 893,338 pounds, consisting of 221,043 pounds of sheet, plate and strip; 35,686 pounds of



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Heavy Chemicals

pipe, tubing and extrusions; 442,854 pounds of forging and extrusion billet, and 193,755 pounds of rod, bar and wire, the Census Bureau reports.

Heavy Chemical Briefs

AEC AWARDS CONTRACTS: Atomic Energy Commission has awarded contracts for supply of chemicals as follows: Balfour, Guthrie & Co., Tacoma, Wash., $87,822, sodium dichromate; L. H. Butcher Company, Seattle, Wash., $54,288, sodium dichromate; Hooker Chemical Corporation, New York, $182,940, caustic soda, 50 percent aqueous solution.

ALUMINUM PROCESS ANNOUNCED: Aluminium Company, Ltd., of England, and Kaiser Aluminum & Chemical Corporation, Oakland, Calif., report development of a new aluminum reduction cell that is expected to have major commercial significance. Details are discussed in the opening section of this column.

GLASS OUTPUT RISE: Shipments of new glass containers in 1962 should hit 25 billion units, up 5 percent over 1961. The forecast was made by Dr. Arthur O. Dahlberg, president of US Economics Corporation, at last week's semi-annual meeting of the Glass Container Manufacturers Institute. Biggest gainers, he said, will continue to be non-returnable beer and soft drink bottles.

Celanese Begins Output Of Clear 'Forticel' Grade

Celanese Polymer Company has begun commercial production of a new crystal-clear extrusion grade of "Forticel" cellulose propionate compounds designed for a variety of injection molded and extrusion applications.

This grade of "Forticel" is made by a new Celanese-developed manufacturing technique which reportedly provides the highest optical clarity attained in cellulosic materials. "Forticel" molding and extrusion compounds are now available in an unlimited range of transparent, translucent and opaque colors, the company says.

Combined with the established properties of high impact strength, dimensional stability and weather resistance, the new crystal grade of "Forticel" is well-suited for transparent tubes, packaging materials, displays, advertising signs and other outdoor applications, according to Celanese.

MADE MANAGER: Carl I. Gochenour, placed in charge of agricultural chemicals in the sales department of Hooker Chemical Corporation's eastern chemical division.

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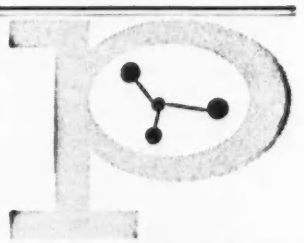

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Here is the literature available on Olin Organic Chemicals

GENERAL

Organic Chemicals Catalog (MOC-131-61)
Organic Chemicals Price Folder (No. 4)
Organic Chemicals Uses by Industry (10-24-60)

TECHNICAL BULLETINS

Omamid Resins for the Surface Coatings Industry (OSD-100C-100)
Poly-G 3030 PG (Polyether Triol) (1-61.IU)
Poly-G 4030 PG (Polyether Triol) (2-61.IU)

TECHNICAL DATA SHEETS:

Chlorinated Solvents

Dichlorodiethyl Ether (MOC-100-119)
Ethylene Chlorohydrin Anhydrous (MOC-129-10)
Ethylene Dichloride (MOC-101-119)

Ethanolamines

Mono-, Di-, & Triethanolamine (MOC-106-119)

Glycols

Diethylene Glycol (MOC-103-99)
Dipropylene Glycol (MOC-128-80)
Ethylene Glycol (MOC-102-99)
Propylene Glycol (MOC-127-80)
Triethylene Glycol (MOC-104-107)

Glycol Ether Solvents

Poly-Solv EM, DM, EE, DE, EB, DB (MOC-105-50)
Poly-Solv D2M (MOC-119-109)
Poly-Solv EE Acetate (MOC-120-119)

Oxides

Ethylene Oxide (MOC-123-10)
Propylene Oxide (MOC-126-80)

Polyamide Resins

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Obituaries

Thomas A. Barber

Thomas A. Barber, general sales manager of J. Howard Smith, Inc., fishing operator and a major factor in the fish oils trade, died December 3 at Long Branch, N. J. He was sixty-two years old.

Hendrick E. Hendrickson

Hendrick E. Hendrickson, president of S. Winterbourne & Co., New York, importers of varnish gums and resins, died December 4 in Queens, N. Y.

Saul Boren, president of Ford Laboratories, New York, manufacturer of vitamins, died December 4 in West Orange, N. J. He was forty-six years old.

Harvey L. Slaughter, vice-president and a director of Glidden Company and general manager of its Durkee Famous Foods Group, died November 29.

William J. Terrence, an executive of the Ozalid Division of General Aniline & Film Corporation, died December 3 in New York. He was fifty-one years old.

Norman J. W. Timmons, assistant sales manager of the resinous products division of Rohm & Haas Company, Philadelphia, died December 5 in that city. He was fifty-six years old.

Current Market Quotations

—*Continued from page 36*

Zircon (G) gran., bgs., 5 tons to c.l., works	lb.	.03⅜-	—
bgs., 1 ton to 9,999-lb lots, works	lb.	.04 -	—
bgs., smaller lots, works	lb.	.06½-	—
Milled, bgs., c.l., works	lb.	.04½-	—
bgs., 5 tons to c.l., works	lb.	.04¾-	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04¾-	—
bgs. 500-1,999-lb. lots, works	lb.	.07½-	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate soln., 13% ZrO_2, dms. c.l. 30,000 lbs. min., works	lb.	.23 -	—
Zirconium hydride powd. electronic grade, dms. works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls. or bgs. works	lb.	1.50 -	—
Electric-fused lump, bgs. 500 to 1,999-lb lots, works	lb.	.48½-	—
bgs., smaller lots, works	lb.	.51 -	—
Milled, bgs., c.l., works	lb.	.62 -	—
bgs., 5-ton lots, works	lb.	.62½-	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½-	—
bgs., 500 to 1,999-lb. lots, works	lb.	.64 -	—
bgs., smaller lots, works	lb.	.66 -	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55 -	.69
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27 -	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.62 -	.85
Zirconium oxychloride, cryst., ctns., 5-ton lots, works	lb.	.37½-	—

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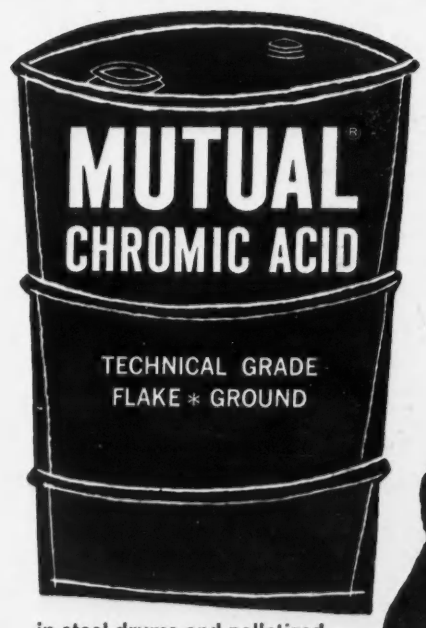

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HOOKER CHEMICALS PLASTICS

Rubber Drying Process: Suit Settled Out of Court

Flintkote Company, New York, reports that it has settled out of court a patent infringement suit which had been filed against General Tire & Rubber Company.

The suit, involving a rubber drying process, was filed in the US District Court at Pecos, Texas, last April 17 by Patent & Licensing Corporation, a Flintkote subsidiary and the exclusive licensor, and Dasher Rubber & Chemical Company, Fairport Harbor, Ohio, owners of the patent on the Dasher process.

At the time the suit was filed Flintkote spokesmen said General Tire was "using a process embodying the patented invention" at the defendant's plant at Odessa, Texas.

Under terms of the out of court settlement, General Tire has been granted a royalty-free license for its Odessa installation whose operation "has successfully proved out the Dasher process," according to Flintkote officials.

The Flintkote announcement pointed out that General's royalty-free license was applicable only to the initial equipment installation and that Flintkote "is now offering licenses to the industry on reasonable terms."

DuPont Hits Von Kohorn

—Continued from page 5

tive relief, an accounting of profits by the defendants, and damages of a large but presently unknown amount.

Three former employees of duPont or Ducilo were named as co-conspirators, but not as defendants "because their present whereabouts are unknown to plaintiffs." They are Ignacio R. Dorronsoro, Antonio de Irureta-Goyena, and Jose Carvalho, jr.

These are the principal allegations of the complaint, says duPont:

"Von Kohorn International Corporation and its subsidiaries design, build, operate, and supply equipment for industrial plants, including plants for manufacture of cellophane, nylon, and polyester fiber and film.

"Since about 1954 the defendants have engaged in a conspiracy to acquire and use for their own advantage information as to confidential manufacturing processes and special machinery and equipment used by duPont and Ducilo. Instead of pursuing their own research, which could be effectively undertaken only at great expense, the defendants hired away fifteen or more employees of duPont and Ducilo, induced them to disclose details of secret processes, and used this information in plants which compete with duPont and Ducilo."

Von Kohorn Denies Charges

—Continued from page 5

that it would meet the allegations with a counter-suit.

President Henry Von Kohorn labeled the claims "baseless" and explained:

"Von Kohorn has never built a plant using duPont's continuous polycondensation process nor any other other so-called secret duPont process."

He went on to say that his concern was "being singled out for harassment as a result of expanding activities."

Speaking from company headquarters in White Plains, N. Y., Mr. Von Kohorn said his organization had been in the synthetic fiber field before duPont and owned more than 500 patents covering fiber and cellophane machinery and cellophane machinery and processes.

The Von Kohorn group of companies, its president pointed out, employs about 150 engineers, chemists and machine designers.

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3. Purification processes such as ion exchange or the removal of impurities from organic compounds by selective adsorption.

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HEADS DIVISION: William F. Mitchell, named to head the new international division of General Mills, Minneapolis, Minn. He is also vice-president and general manager of the company's chemical division.

Fuller Paint Concern Set To Go to Hunt Foods, Inc.

Hunt Foods & Industries, Inc., Los Angeles, has reached tentative agreement on terms for a merger with or acquisition of W. P. Fuller & Co., San Francisco paint manufacturer and retailer.

Fuller is a 112-year-old concern which markets paint and glass under its own name in more than 150 retail outlets in eleven western states.

HEW Chief Says 'No' To Senatorial Campaign

Secretary of Health, Education & Welfare Abraham A. Ribicoff plans to continue fighting on the Kennedy team, pushing various HEW programs.

Answering widespread speculation that he might run for the senate from Connecticut in 1962, Mr. Ribicoff told reporters last week that "the answer is 'No'."

"I have a job to do here and I intend to give it all I can, like I always have done," the secretary said. But Mr. Ribicoff then displayed his politician's ability to hedge a statement:

"What the future holds, I just don't know, and after many years in politics, I know that the future is always hard to predict."

Reppe-Type Intermediates Now Available From GAF

General Aniline & Film Corporation, New York, has introduced six high-pressure acetylene-derived intermediates in development quantities. They are 2,5-dihydrofuran; mercuric pyrrolidone; butynediol bis-hydroxyethylether, divinyl ether of butynediol; pyrrolidone-bromine complex, and gamma-aminobutyric acid.

GAF says the chemicals are so new that only limited areas of application have been established. The company welcomes further investigation. Data sheets are available on request from the commercial development department.

Synthetic Rubber

—Continued from page 4

specific rubbers—polyisoprene, polybutadiene and others—has caused concern about the future of the older SBR (styrene-butadiene) synthetic rubbers, he went on.

"Undoubtedly, the new rubbers will reduce the growth potential of the SBR types," he said, "but their volume may hold up surprisingly well. Their costs are low and the plants have been in operation sufficiently long to be substantially amortized.

"However, the excess SBR production capacity has brought about an extremely competitive situation."

More than adequate supplies of raw material for the older synthetics, together with a large number of raw material producers, Dr. D'Ianni pointed out, makes for a highly competitive situation, and continued pressure will be exerted on the present market price of such raw materials.

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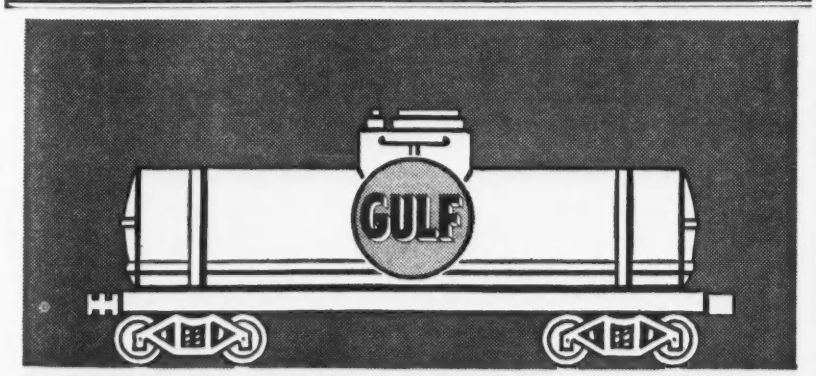

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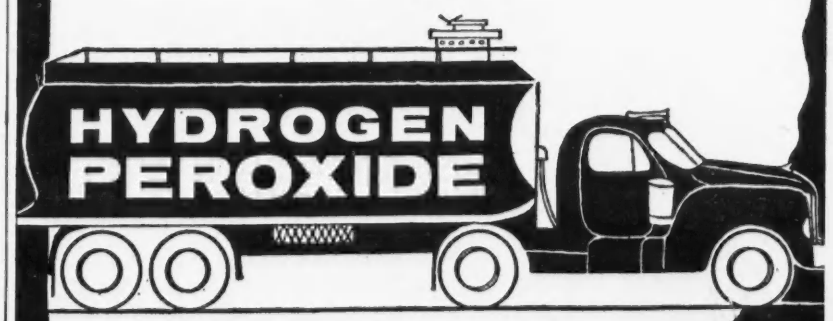

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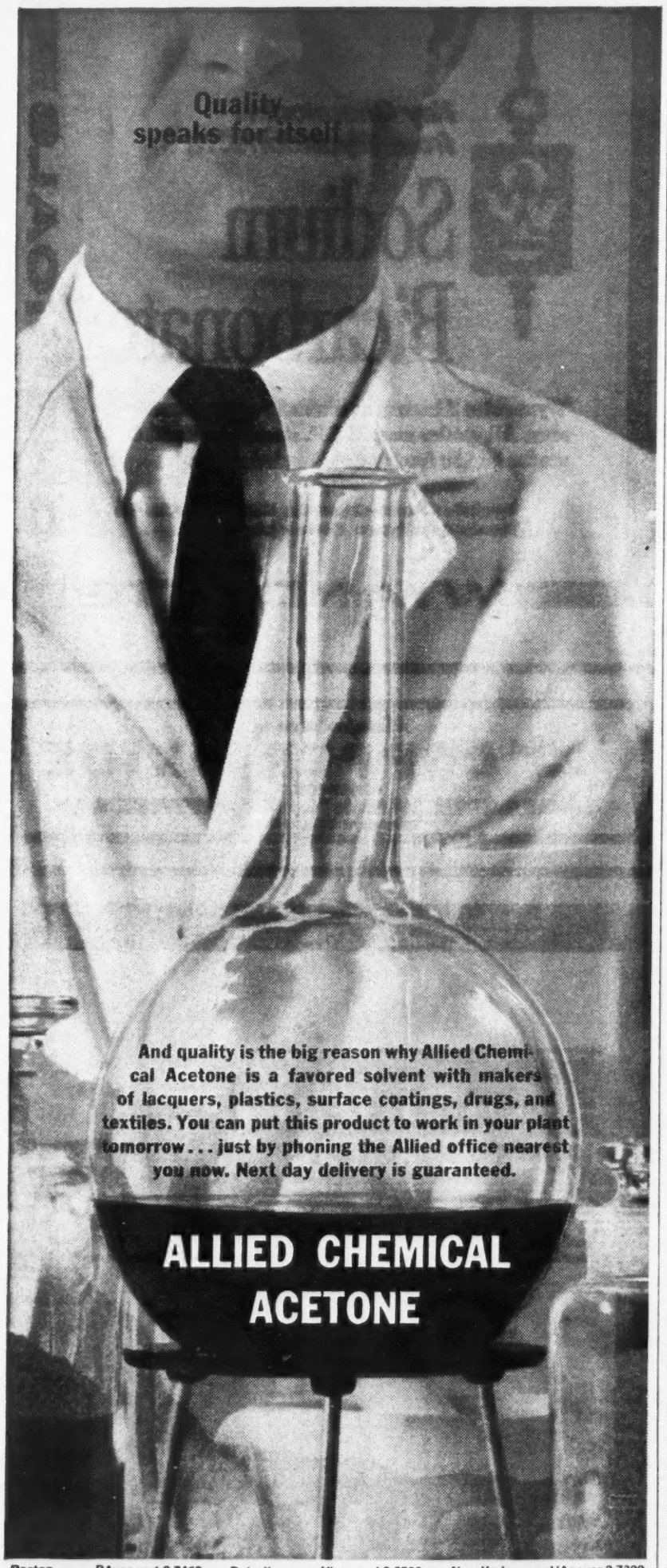
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Coal Chemicals

A major tar acids producer is raising the price of o-cresol 1 cent-a-pound across the board effective on contract January 1 and on spot December 15. o-Cresol has been in tight supply this year. Export demand has been strong. Domestic producers have been hard pressed by rising raw materials costs and the 1 cent advance reflects increased costs. New schedule will read: 30.5°C melting point and over, 16 cents for tankcars, freight equalized, 18 cents for carlot drum shipments and 19 for less carlots; 30° to 30.49°C, 15½ cents for tankcars, 17½ cents for carlot drum shipments and 18½ cents for less carlots; 29° to 29.9°C, 15 cents for tankcars, 17 cents for carlot drum shipments and 18 cents for less than carlots; 25° to 28°C, 14 cents for tankcars, 16 cents for carlot drum shipments and 17 cents for less than carlots.

Toluene price became 25 cents, delivered, on December 6 as a major coke oven producer made official what had been the de facto price for some weeks.

Of the fourteen major coal chemicals listed by the Tariff Commission in its monthly production report, seven show declining output when compared with last year while seven display gains. Those chemicals with lower production this year are chiefly large volume intermediates. Basic products generally show increased production. Totals are now complete for the first nine months of 1961.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
119.84	119.84	119.86	117.56

For Current Prices See Page 11

January 1 Price Advances
o-Cresol, 1c. per lb.

When compared with production for the same period last year styrene monomer is down 75.2 million pounds; monochlorobenzene is down 68.6 million pounds; naphthalene, down 49.7 million pounds; dodecylbenzene, down 10.3 million pounds; phenol down 5.6 million pounds and phthalic anhydride down 4.5 million pounds. Cresols lost less than a million pounds.

On the up side, benzene output through September is twenty percent ahead of last year's output through the first three quarters. And, in fact, has already exceeded 1959 output by 43 million gallons. Production for the year should be in 480 to 500 million gallon range.

The other light oils, toluene and xylene, are 20.3 million gallons and 5.1 million gallons ahead respectively of production totals in the first nine months of 1960.

Cresylic acid is 5.1 million pounds ahead of last year's pace; creosote has gained 4 million gallons; aniline, after a slow start, is 1.2 million pounds ahead of last year, while tight supplied refined pyridine is a scant 100,000 pounds ahead.

Basic Products

Steel production surged forward in the week ended December 2, advancing 2 percent over the previous week's output.

Production for the week was 2,073,000 net tons as compared with 2,032,000 tons in the previous week.

Based on assumed 1961 steel capacity, rate of production for the week was 71.9 percent.

Output for the year through December 2 was 88,953,000 tons, 4.6 percent below the 93,202,000 tons turned out in the comparable 48 week period last year.

Benzene—Market picture is unchanged with supply reported more than ample and demand indicated to running steady. Price remains 31c. a gallon.

Production of benzene in September was 36.7 million gallons, down 5.8 million gallons from August, but up 1.2 million gallons from September, 1960.

Coke oven operators produced 10.1 million gallons of benzene in September, approximately the same volume as in August.

Petroleum processors accounted for 26.6 million gallons, down 5 million gallons from August.

Total benzene output for the year through September was 372.8 million gallons as against 342.5 million gallons in the same period last year.

Coke oven operators produced 83.8 million gallons of benzene in the first nine months of 1961; petroleum processors turned out 282.9 million gallons, and tar distillers' output was 6.1 million gallons.

Cresylic Acid—Urgent demand and a limited supply to meet needs feature the cresylic acid market.

One producer reports his plants are going full blast to fulfill orders.

Domestic demand is rated good. Export calls are extremely heavy. South America and Europe are all ordering in volume.

Recent expansion announcements by coke oven and petroleum producers amounting to 18 million pounds will boost industry capacity to 173 million pounds in 1962 which should ease the supply situation at home and abroad.

Toluene—A major coke oven producer last week announced a 25c.-a-gallon price effective Dec. 6.

Toluene production is currently running 20 percent ahead of last year with nearly 90 percent of all material coming from petroleum processors.

Intermediates

Phthalic Anhydride—Market is relatively unchanged from previous reports. Producers' stocks continue ample to meet consumer needs that are deemed only fair.

Phthalic anhydride production for September was 31.6 million pounds, down 1.7 million pounds from August. Phthalic production for the year through September was 285 million pounds as against 289.5

Aromatic Chemical Output: September

Figures for benzene, xylene and toluene include cokeoven operators, tar distillers and petroleum operators. Naphthalene figures include cokeoven and petroleum sources. Cresote oil statistics include distillate as such, and creosote content of solution, on 100%-creosote basis.

		September 1961	*September* 1960	*First Nine Months* 1961	*First Nine Months* 1960
Aniline	lbs.	10,385,767	10,091,870	92,718,601	91,544,871
Benzene	gals.	36,702,278	35,493,386	*372,837,310	342,452,191
Creosote, dead oil	gals.	8,071,669	6,091,377	72,900,589	68,816,938
Cresols m-p and o-m-p fractions	lbs.	4,423,943	4,055,696	35,978,868	36,871,081
Cresylic acid, refined, all sources	lbs.	5,183,526	4,766,539	49,336,487	42,819,185
Dodecylbenzene	lbs.	44,540,613	43,251,829	355,245,154	365,536,920
Monochlorobenzene	lbs.	46,319,287	43,630,975	381,867,441	449,852,406
Naphthalene, crude	lbs.	45,447,381	38,392,767	348,097,744	397,837,932
Phenol, tech and USP	lbs.	58,693,929	59,309,101	*572,129,168	577,739,866
Phthalic anhydride	lbs.	31,614,358	29,168,883	284,993,085	289,523,691
Pyridine, refined 2°	lbs.	266,206	175,177	2,116,420	1,955,787
Styrene monomer	lbs.	136,135,192	147,747,792	1,256,119,151	1,331,275,644
Toluene	gals.	22,908,367	23,636,364	220,729,796	200,405,724
Xylene	gals.	26,999,473	27,762,899	232,984,832	*227,858,282

* Revised. Source: Tariff Commission.

Coal Chemicals

million pounds in the same period last year.

Styrene Monomer—Despite Tariff Commission figures showing styrene production down in September, producers report volume buying occurred in October. Principally for the heavy holiday trade, styrene sales to plastics manufacturers enjoyed a good month but dropped off in November. December is expected to be slower as well. This is normal. Activity is expected to pick up again by the end of January or in February.

Styrene monomer production dropped 12 percent in September. Output was 136.1 million pounds as against 154.5 million pounds in August.

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended December 2, were as follows:

Ammonia liquor	lbs.	620,354
Ammonium sulfate	lbs.	26,395,822
Benzene	gals.	2,844,876
Coaltar	gals.	14,350,070
Crude chemical oil	gals.	561,829
Solvent naphtha	gals.	93,638
Toluene	gals.	632,058
Xylene	gals.	175,562

Output for the year through September was 1.256 billion pounds, as compared with 1.331 billion pounds last year in the comparable period.

Styrene resins suffered reverses in September except for the catchall category of "all other uses" and sales of styrene resins for protective coatings according to the Tariff Commission.

Straight polystyrene production in September was 27.5 million pounds with sales of 26.2 million pounds as compared with August production of 29.8 million pounds and sales 26.1 million pounds. All other polystyrene resins for moulding and extrusion showed production of 41.6 million pounds and sales of 37.2 million pounds as against August output of 36.9 million pounds and sales of 34 million pounds.

Textile and paper treating and coating resins also declined.

Coal Chemical Briefs

KOREA SEEKS PITCH: The Korean government is seeking 5,300 metric tons of coal tar pitch packed in reconditioned steel drums or jute bags. Pitch in drums will be considered equal to that in jute bags plus $3 per metric ton net. Specifications are: softening temperature, 140°F to 167°F; volatile matter, 50 to 80 percent; ash content, 1 percent maximum; fixed carbon, 20 to 50 percent; calories per kilogram, 8,800 minimum, and sulfur content 1.5 percent.

Delivery should be as soon as possible but no later than March 31, 1962. Quotations on invitation no. KFX-1003-S should be per net ton for delivery f.a.s. vessel, port of loading, or c. and f., or c.i.f., port of discharge in Korea (buyer's option). Bids should reach Office of Supply, Government of the Republic of Korea, Seoul, by 10 a.m., December 15.

Chemical Specialties

—*Continued from page 7*

York, declared that the chemical industry's problems with government are due primarily to inadequate knowledge of the industry on the part of people at large.

• "Glade Mist Air Freshener," a product of S. C. Johnson & Son, Inc., Racine, Wis., won top prize among 493 entries in the association's tenth annual packaging contest.

Elected with Mr. Allderdice, who will head up CSMA until next December, are the following:

First vice-president, Donald J. Templeton, marketing and merchandising consultant for Stanley Home Products of Easthampton, Mass., and second vice-president, Earl Breen, president of Huntington Laboratories of Huntington, Ind.

Mr. Beach, who is president of John C. Stalfort & Sons, Inc., Baltimore, Md., urged CSMA to move in two basic directions: to educate the public and to establish closer contact with state and local legislatures.

In doing so, he added, the industry should strengthen its ties "with other groups working toward the same ends."

Pointing out that the public has no concern for, nor sympathy for, the chemical industry, Mr. Coleman asserted that the industry faces a major problem in persuasion, education and public relations.

The chemical industry is at fault, he continued, because it hasn't told the public enough. What's needed, he said, is more education—through its own associations, trade press and other media.

The S. C. Johnson aerosol not only received CSMA's grand prize as "best of show" in the packaging competition, but also won top honors in the room deodorants class—one of the seventeen product categories in which awards were made.

Carbide Develops Polyether For Flame-Laminable Foam

Union Carbide Chemicals Company is now marketing a new polyether intermediate developed for production of flame-laminable urethane foam for clothing innerliner applications.

Carbide's material, trade-named "Niax triol LF-70," is said to produce fabric-foam laminates of high quality and durability.

Among the primary advantages of polyether foam, the company says, are high uniformity of cell structure and high bond strength in the finished product. Polyether formulations are also said to be less viscous than the polyesters, making it easier to adjust properties to end-use requirements.

The new polyether is priced at 27 cents a pound in tankcars, 4,000 gallons minimum; 29½ cents in carloads and 31 cents in smaller shipments, f.o.b. shipping point, freight allowed.

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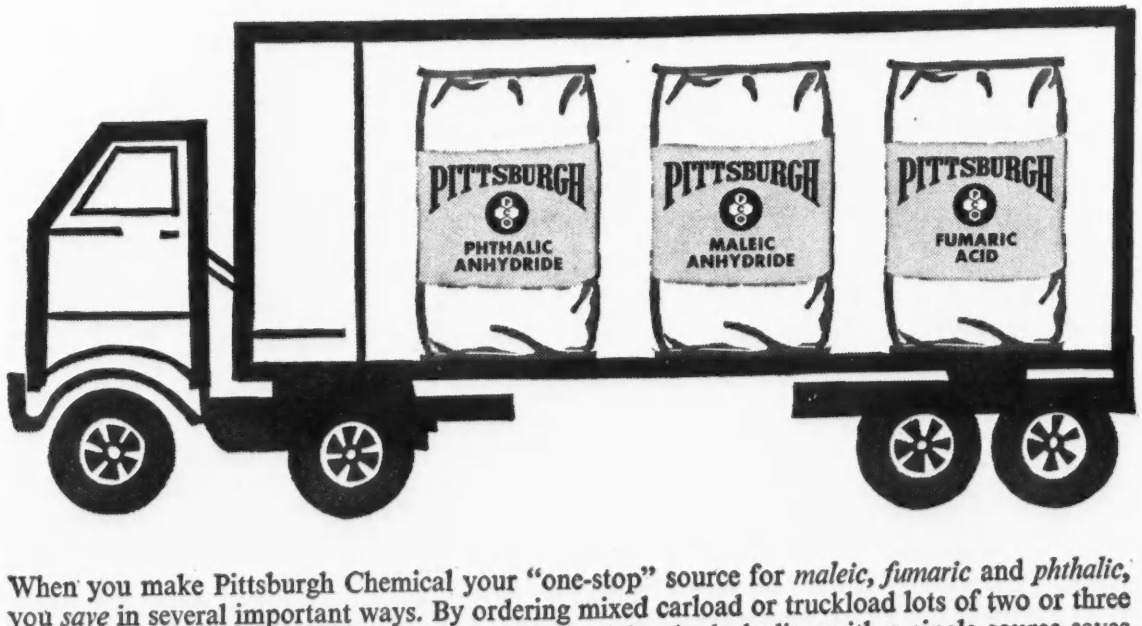

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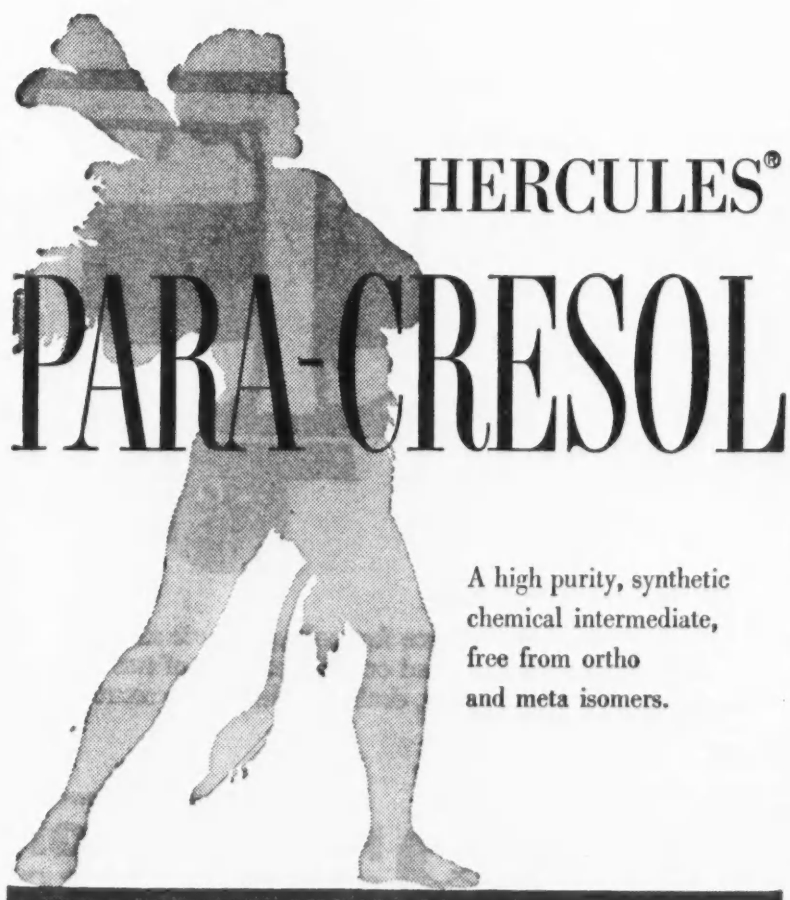

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Nitrogen Running With Polyethylene

—Continued from page 7

fertilizer products, polyethylene packaging materials, adhesives and coal mining.

In moving its polyethylene operation to the ultimate consumer, Spencer deliberately "leap-frogged" the extrusion stage of the business. Three flexible packaging firms with combined assets of about $5 million were acquired in the past year.

Spencer now has no definite plans to extrude film itself, but the company "is flexible enough to accommodate that, should it become desirable," Mr. Denton said.

Meanwhile, Spencer is pushing its research into copolymers and new plastics and has available "the necessary technology to enter manufacturing of polypropylene and related plastics when our market position warrants it."

Sees Growth in Polypropylene

Spencer, which now markets polypropylene made to its specifications by Enjay Chemical Company, a division of Humble Oil & Refining Company, expects polypropylene consumption to grow to about 350 million pounds by 1965.

Most of these sales will be in resins, the company feels, as no major market development in fibers is foreseen during the five-year period.

Relative to a recent anti-dumping action by France (OPD, 11/6/61), E. V. Friedrich, vice-president of plastics, vindicated Spencer's position and predicted an increasing trend in Europe to protect local production by implementing anti-dumping regulations.

Replying to another question from the floor, Mr. Friedrich said that Spencer's merger program faces no danger of antitrust action such as the recent ruling that Union Carbide Corporation must divest itself of Visking Corporation.

He noted that Spencer is a small company compared to Carbide, as are the firms acquired relative to Visking. In addition, Spencer does not sell plastics to its own companies, but rather to extruders.

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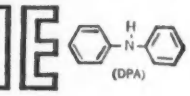

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Agricultural Chemicals

Farm Chemicals Up on January 1: NH_4 Nitrate, the Sulfates and DDT

January 1 is a benchmark in fertilizer pricing. With the advent of the new year, producers will begin selling a number of fertilizer materials at prices higher than currently scheduled. DDT will also be increased. The materials due to go up are: ammonia, $3 to $95 a ton; ammonium nitrate, bagged and bulk, up $3 to $70 and $64 a ton respectively; nitrogenous sewage sludge up 15 cents a unit-ton; nitrogen solutions, up $3 a ton; potassium sulfate, up 3 cents to 73½ cents a unit-ton; purified ammonium sulfate, up 1 cent to 9½ cents a pound; sodium nitrate, up $3 a ton, and DDT, up 4 cents to 21 cents a pound.

Except for DDT and purified ammonium sulfate, these increases are scheduled far in advance by postings that reflect seasonal changes in demand and problems inherent in fertilizer production.

Fertilizer simply cannot be sold or used except when application is appropriate. Neither does the consumer want to carry fertilizer in inventory.

Demand follows a predictable pattern. Peaks are encountered in the first half of the year and in the fourth quarter. Third-quarter fertilizer demand is normally slow.

January 1 Price Advances

Ammonia, $3 a ton
Ammonium nitrate, bulk and bagged, $3 per ton
Ammonium sulfate, purified, 1c. per lb.
DDT, flake or lump 4c. per lb.
Nitrogenous sewage sludge, 15c. per unit NH_3
Nitrogen solutions, $3 a ton
Potassium sulfate, min. 50 percent K_2O, 3c. per unit-ton
Sodium nitrate, $3 a ton
Urea, bulk and bagged, $4.75 per ton

Rather than shut down fertilizer plants during the slack demand periods and entail costly shutdown and startup costs, as well as employment problems, producers run the year around.

Heavy inventory costs are thereby incurred by producers in the off seasons. These are naturally passed on to consumers. Higher prices for fertilizers therefore occur in the peak consumption periods to offset the inventory costs run up by profaithfully.

In general, however, fertilizer prices will remain fairly stable when compared with prices at the beginning of 1961. Some materials, in fact, will enter 1962 at postings lower than those put into effect in January of this year.

Potassium sulfate, for example, which rises to 73½ cents a pound on January 1, was scheduled at 70½ cents a pound last January.

Urea and DDT prices will be lower this coming January than last.

Last January urea was posted at $100 a ton while the new price for 1962 will be $90 a ton in bulk.

DDT, which briefly dropped to 17 cents in the fourth quarter, is slated to go up to 21 cents again on January 1. Price at the start of 1961 was 23 cents a pound.

Ammonium nitrate, however, will go up to $70 a ton in January, the same price as scheduled in the first quarter of this year. Nitrogenous sewage sludge will be $3.50 a ton in January, again the same price made effective in January, 1961.

Price Trends

Advanced
None

Reduced
Fishmeal, $2.50 per ton

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
111.84	112.41	111.60	110.04

For Current Prices See Page 11

Animal and Plant Foods

Fishmeal—Trading last week was reported in the range of $120 to $122.50 a ton, Atlantic and Gulf ports, a decline of $2.50 a ton from the previous week.

Imported fishmeal is reported coming in at about $114 a ton.

Menhaden season off the Carolinas is about two weeks old and is reported good except for a period of bad weather last week which kept the fleets in harbor for several days.

Phosphatic Acid—One producer has cut the price of phosphatic acid 75 percent, also known as phosphatic solution, in sales to the liquid fertilizer trade by $3.50 a ton.

The producer's new price is $78.50 a ton.

Other major producers contacted last week had not yet made any reduction. Some indicated they did not intend to do so while others indicated they might meet competition where it arose.

Pesticides

DDT—The delay in implementing the overseas DDT program promises to create serious problems in the domestic as well as the export market.

Latest word from Washington is that although Congress has appropriated the money, the Agency for International Development (AID) has not allotted funds to the different missions in the twenty some odd countries participating in the anti-malaria program.

What's happening is that since the old ICA was reorganized under the State Department and became AID, all foreign programs, and there are thousands of them, are being reviewed and evaluated.

How long this study will take to complete is not known even by government sources.

But while official approval is awaited there are countries whose need for DDT is urgent. India and Pakistan are among them.

Normally DDT government purchases for overseas shipment run from late October to early June, a total of about eight months. Now it looks like the buying will be squeezed into six months.

The effect on domestic producers and consumers is likely to have serious overtones, too. There are just so much grinding facilities available. And, if with the beginning of the domestic season in February no significant export material has been moved, then delays in supplying the domestic market are sure to be encountered.

The result will be a strong market situation next spring one producer commented last week. One indication of the expected tight market came a fortnight ago when DDT price shot back up to 21c. a pound.

Pesticides Production: September

Following are production statistics reported by the Tariff Commission representing the number of pounds of selected pesticides produced during September, 1961 and September, 1960, together with production totals for the first nine months of 1961 and the similar period of 1960. Totals may include in some cases partially estimated volume.

	September 1961	September 1960	First Nine Months 1961	First Nine Months 1960
DDT ..... lbs.	13,698,719	13,749,893	132,517,171	120,301,001
2,4-D ..... lbs.	2,463,408	2,155,744	28,518,894	28,529,304
2,4-D acid ester & salts ..... lbs.	1,928,805	1,614,062	20,365,212	23,910,326
2,4-D acid equivalent of esters & salts ..... lbs.	1,312,598	1,183,719	14,966,292	17,831,050
BHC ..... lbs.	1,470,714	1,607,984	12,336,863	28,842,535
Gamma isomer ..... lbs.	450,555	534,719	6,632,077	5,790,328
2,4,5-T ..... lbs.	479,647	—	4,144,955	3,864,427

Trade Name Chemicals

Heavy Duties: Will They Capture More of the Liquid Syndet Business?

Heavy duty liquid detergents, already estimated to have gained a 16 percent-plus share of the 700-million-pound liquid syndets market, may take an even bigger bite next year if new products for improving performance characteristics of HDLD formulations continue to live up to their early promise. Interest, along with volume, in heavy duty liquids has skyrocketed in recent years largely as a result of introduction of nationally-advertised products such as "Wisk" and "all" (Lever Brothers Company) to the consumer market. Colgate-Palmolive Company is entering the market with a product called "Dynamo" and other heavy duties are believed to be in preparation.

But just how far the heavy duties can go will depend on a number of factors, not the least important of which, observers say, is the industry's ability to produce a clear, homogeneous product which is stable over relatively long storage periods and under rigorous freeze-thaw cycling.

The high solids content of heavy duties—the average product may contain 20 percent phosphate builders—results in incompatibility and salting out, which has presented a big problem in making up HDLD formulations.

That this, and other problems, are in the process of being ironed out was evidenced by reports from the Detergents & Cleaning Compounds Division of Chemical Specialties Manufacturers Association, which took heavy duty liquid detergents as the theme of its December meeting in New York last week.

New Products Under Discussion

New products discussed at the two-part meeting of the detergents section included a whiteness retention aid based on carboxymethyl cellulose and two alkali-soluble acrylic emulsions for use as stabilizers in built nonionic liquids. Also reported were developments in phosphate builders and hydrotropes in HDLD systems, phosphate ester surfactants, and amphoteric sulfonates.

The new CMC (sodium carboxymethyl cellulose) product, from Hercules Powder Company, is described as an extremely low molecular weight type which is compatible with heavy duty liquids.

According to Jack B. Batdorf, sales supervisor for Hercules' Cellulose & Protein Products Department, "CMC 7AA," available now in limited quantities, should be in full-scale production by mid-1962. Use of CMC in detergents has been estimated at about 20 million pounds annually, or about half of the production total (OPD, 12/19/60).

Just how CMC works as an anti-redeposition agent is not clearly understood. However, Mr. Batdorf says research work at Hercules using radioactive tracers supports a cellulose adsorption theory.

Taking this view, it's believed that strong electrostatic repulsion is set up between negatively charged dirt particles and increased negativity of the cellulose. This increased negativity of cellulose is induced by carboxymethyl groups of the adsorbed CMC.

Until now techniques for using CMC in heavy duty liquid detergents have all presented quality control problems. The high concentration of cations in these formulations is said to inhibit swelling characteristics of CMC and thus prevent dissolution of the polymer.

New CMC is Compatible

"CMC 7AA," however, is reported to be compatible in concentrated HDLD systems, while maintaining high whiteness retention characteristics.

Rohm & Haas Company is hoping that nonionic surfactants will now be able to snare a bigger share of the HDLD market. The company is banking on the success of two new alkali-soluble emulsions, introduced at the CSMA meeting, which are said to make possible the preparation of stable, built liquid detergent formulations containing nonionics.

Despite the rapid growth of nonionic surfactants as a group—from 13.5 percent of total surfactant production in 1950 to 29.5 percent last year—their use in liquids has been limited by the fact that they are easily salted out of builder solutions.

This salting out characteristic of the nonionics has presented a substantial problem with respect to formulating liquid detergents containing nonionics and alkaline builders.

In general, there have been two main approaches to the problem of making up a homogeneous liquid product and maintaining the homogeneity over long storage periods under conditions of freeze-thaw cycling and high-temperature storage.

One approach is to allow the nonionic to remain as a separate phase but disperse and stabilize it in the builder solution in the form of a fine particle size emulsion.

Another method involves use of hydrotropic agents to solubilize alkyl aryl sulfonates in builder solutions and give single phase systems. However, currently available hydrotropes are reported not particularly effective in solubilizing nonionics especially at practical builder concentrations.

Ultra Chemical Works, Paterson, N.J., has conducted studies on hydrotropes involving the relative effectiveness of sulfonates of isomeric alkylbenzenes in the C-6 to C-9 range and systems containing commercial dodecylbenzene sulfonates and phosphate builders. Utilizing this data tailor-made compositions are possible, Ultra reports.

Products Are Methacrylic Acid-Based

The new R&H products, "Polymer A" and "Polymer M," are high molecular weight copolymers of methacrylic acid offered as 20-25 percent dispersions of low viscosity.

In order to show stabilization properties, R&H says, the copolymers are converted to salt form. They are not regarded as useful stabilizers in acidic systems having a pH of less than 5.

Using polymeric stabilizer in liquid laundry formulations, the company's tests indicate stability can be maintained for more than 170 days at 120 degrees F.

Similarly samples are unchanged after multiple freeze-thaw cycles where a cycle consists of a 20-hour seven degree Fahrenheit cold period followed by a four-hour thaw at 75 degrees F.

A substantial volume of polyphosphate builder is used in the production of detergent formulations. However, the high solids requirement of heavy duty liquids limits the type of polyphosphate which can be used.

It's felt that sodium tripolyphosphate would form a desirable builder from an economic standpoint if problems of limited solubility in aqueous systems and tendency to hydrolytic reversion could be overcome.

According to Monsanto Chemical Company, practically all commercial heavy duty liquid detergents make use of tetrapotassium pyrophosphate which is highly soluble in aqueous systems and has good resistance to degradation.

Peptone Made Available By CSMA, Armour Pact

Peptonum siccum, a standard protein source used in laboratory testing, will be sold through Chemical Specialties Manufacturers Association as a result of an agreement announced last week between CSMA and Armour & Company.

Because demand for peptone is so limited, its manufacture was discontinued last year. Since then, however, there has been growing concern among laboratories involved in disinfectant testing, one of the major uses for peptone.

Armour will manufacture and sell peptone in bulk to CSMA. The association will fill orders for the materials on the basis of five pounds per month and will make it available in that quantity only. Cost per five pounds is $62.50 to members and $75 to non-members.

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Petroleum Derivatives

Reports vary as to the present benzene-toluene supply situation. Toluene supplies have been reported a little snug over the past months, in spite of the recent one-half cent price cut on the East Coast. A general easing of benzene supplies has been in evidence for some time. However, some sources are now maintaining the contrary, as regards both of these key aromatics. These same sources have it that benzene is by no means in danger of an oversupply situation—at least, not immediately. Their claim is that demand will be heavy enough to warrant the booming benzene expansion program in prospect for 1962.

On the toluene side of the market, not everyone is willing to corroborate the rumor that supplies have been a little snug. Of course, in both the cases of benzene and toluene, reports are bound to differ from one producer to another.

This is in line with the fact that one producer may have his BTX units geared for production of a specific material, while drawing on his stockpiles for another. A second producer may be geared to another material's production. Thus, supplies of any given material at a given time will inevitably differ from producer to producer.

Meanwhile, a leading steel producer has joined the ranks of those who list their overall toluene price at 25 cents per gallon, delivered. The announcement comes as no surprise, inasmuch as the "localized" price has spread to the point where it is no longer localized.

Aromatics

Benzene—A slow but steady easing of the supply situation is the keynote here. Some producers still maintain, however, that supplies are not so loose as to shake down the 31c.-per-gallon price, established this past July. Others go so far as to maintain that the current benzene situation still shows traces of the tight supply situation prevalent a year ago.

These producers are insistent in their belief that the present all-out expansion of the industry is imperative in order to take care of current and future needs. A good many producers, however, are not quite so enthusiastic in the face of the huge benzene capacity projected for the end of 1962. They fear another price cut may be in the offing.

Benzene turned out by petroleum processors in September was down 16 percent from the August figures. The 26,589,368 gallons of petroleum-derived benzene produced in September, according to the Tariff Commission, represented 72 percent of benzene output from all sources.

Toluene—Mixed reports are coming in from this end of the market. Some producers are adamant in their claims that toluene supplies are just ever so slightly on the snug side. These same producers make the statement in protest over the recent ½c. price cut in most of the metropolitan areas on the East Coast. They feel the cut was entirely unjustified from the point of view of the overall industry.

At least one report, however, takes the logical position that it was a slight oversupply situation that sent toluene prices down, for all practical purposes, to 25c. per gallon, delivered.

Neither camp is much worried over toluene prices dropping further. The 25c. price is all but the established price at present on the East Coast, producers say. This price has been current in the midwest for quite some time.

Petroleum toluene production in September amounted to 20,013,757 gallons, says the Tariff Commission, down 11 percent from August. Petroleum sources accounted for 87 percent of all toluene turned out in September.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100 = 1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
104.13	104.13	104.13	103.74

For Current Prices see page 11

Xylene—Tariff Commission reports 26,999,473 gallons of xylene turned out from all sources during September. Of this total, 98 percent was the combined efforts of petroleum processors and tar distillers. The 26,418,439 gallons produced by these two sources was an increase of 7 percent over their August output.

LPG's and LRG's

A sharp drop is noted for production of both LPG's and LRG's for the November 1-15 period, as compared with the previous two weeks. Light pressed gas production is down 6 percent, refinery gases down a sizable 16 percent.

The 378,884,000 gallons of LPG's turned out in the first two weeks of November according to the American Petroleum Institute, was, however, considerably more than the 343,917,000 gallons produced during the comparable period of 1960.

LR-gases also, despite the drop-off from the previous two weeks, marked an increase over the November 1-15, 1960 period—123,240,000 gallons, as against 122,818,000 gallons.

Stocks of LPG's rose a whopping 32 percent over those a year ago November 15, while falling off a mere 4 percent from the end of October. LRG stocks dropped a trifling 0.5 percent from October 31, at the same time they soared 156 percent over those a year ago. The remarkable increase in the figures reflects the fact that LRG propane, butane, and butane-propane mix have all virtually tripled their inventories during the course of the year.

Miscellaneous

Distillate Fuel Oil—Weather, up till now the major controlling factor in distillate-fuel demand, may no longer play such a domineering role. At present, space heating accounts for 67 percent of US consumption. But reports have it that new uses are creating a growing market for this refinery product.

For 1962, Independent Petroleum Association predicts total distillate-fuel-oil demand will be 1,962,000 barrels per day, with normal seasonal temperatures. This is 1.5 percent higher than the 1,932,000 barrels per day forecast for all of 1961.

Significant is the association's high prediction for distillate demand during the heating off-season (April to September) of 1962. Requirements for this period are forecast at 1,410,000 barrels per day. Distillate demand during the six-month off-season period in 1961 was 11.2 percent higher than in the same months of 1957. Over the same period total distillate demand increased only 6.2 percent.

The current trend of demand in the heating off-season reflects efforts by oil companies to develop new markets for distillate fuels.

Crude Oil Stocks Fall

Domestic and foreign crude petroleum stocks at the close of the week ended November 25 were 2,108,000 bbls. lower than at the end of the preceding week.

Week ended November 25—248,800,000 bbls.

Preceding week—250,908,000 bbls.

This comprises a decrease of 2,608,000 bbls. in stocks of domestic crude and an increase of 500,000 bbls. of foreign crude.

(Source: Bureau of Mines)

Petroleum Briefs

MOROCCAN OIL: Traces of petroleum have reportedly been found in the Moroccan region of Essaouira (Mogador) by the Moroccan Petroleum Company, SCP. Further drillings are necessary, it is stated, to determine the size of the findings.

PARAFFIN BUILDUP: Cities Service Petroleum Company reports having solved the problem of paraffin buildup in its oil pipelines. At its Brownfield, Tex., facility, the company has installed flow or lead lines from each well, consisting of two-inch "PVC Schedule 40" pipe made of rigid "Geon" vinyl.

The plastic pipe is used for this purpose because of the high paraffin content of the oil and the tendency of this material to build up in metal piping.

Vinyl Acetate Market Battle Looms As One More User Back-Integrates

Production of vinyl acetate monomer is expected to hit 315 million pounds this year for a 25 percent gain over the 251 million pounds turned out in 1960. Furthermore, the sharp increase likely extends to sales, which have been growing of late at a faster clip than output. Next year, it's believed, historical growth patterns will prevail once again, but thereafter merchant sales volume will necessarily decline as several major producers of vinyl acetate derivatives back-integrate. Obviously, the five firms who make monomer today and who, as an industry, sell more product than they consume captively, have got a marketing battle to prepare for.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
129.64	129.64	130.02	130.70

For Current Prices See Page 11

Within the past year, three of their customers have slated monomer facilities, and last week they got word that still another competitor will be on the line by the end of '62. A leading chemicals firm with a grass-roots approach to chemical manufacture disclosed it is putting up a 45-million-pound-a-year plant at Texas City, Tex., using its own acetylene and ethylene-derived acetic acid in the process.

Reaction to 'Inevitable' Announcement

Immediate and general reaction to the announcement, a jolt softened by its inevitability, was one of relief. It looks, says a trade source, like the end of a chapter if not the book on new ventures into the monomer market.

The fact is, there is today no firm left who is able to get into monomer production by virtue of having all three requisites: raw materials, captive requirement, money. Save one, that is. And although this firm has announced its intention to put up a 50-million-pound-a-year facility, it's rumored that the move is still quite a way off.

Despite the trade talk, however, indications are that the facility will definitely be built. The firm which is slated to purchase a goodly percentage of the projected monomer plant's output is right now constructing a vinyl chloride acetate copolymers facility and it is more than supposition that the monomer is to be channeled to this operation.

All told, these expansions will bring total vinyl acetate monomer capacity to 571 million pounds in 1963. Today the figure is 331 million and production is supplemented by imports, almost entirely from Canada.

Through September, imports amounted to 30 million pounds and before the year is out volume probably will reach or exceed that of 1960 (42.5 million pounds).

Since much of this imported monomer ultimately gets to the firm which has just announced a plant of its own, imports could be cut back. But it's doubtful. It's reported, for example, that the firm has been purchasing a goodly amount of monomer in the US.

If monomer production hits the estimated 315 million pounds this year, the domestic trade is operating at 95 percent of capacity. But as customers complete plants, they're obviously going to have to curtail output unless, of course, they decide to upgrade the monomer themselves.

This is a distinct possibility for two reasons. First, all but the smallest of today's monomer producers are using a percentage of their output captively and, secondly, their open-market business exceeds their total internal requirement. In 1960, for example, sales were 171 million pounds, production 251 million; in 1958, the ratio was 160 million to 244 million.

The saving factor for all concerned is that the market for vinyl acetate monomer is expanding. Latex paints, adhesives, rigid applications such as floor tile for copolymers: all are areas displaying excellent growth potential.

But it will be a while before the field gets big enough to accommodate everyone. In the interim, a price cut on monomer is unlikely, though not so commodity selling of some of the derivatives.

Butadiene—Butadiene, which is used primarily in the manufacture of SBR, is today being challenged by new developments in rubber chemistry.

Ethylene-propylene rubber, for example, is in the R&D stage. One firm is researching processing methods, eventually plans to mold pilot samples into a variety of parts and components now being made of "natural rubber as well as butyl, chlorosulfonated polyethylene and SBR."

Introduced by an Italian chemical giant about a year ago, ethylene-propylene rubber is but one of several new synthetics. One US firm reportedly is ready to begin production of a similar copolymer and another firm is working on a polypropylene terpolymer.

Polypropylene rubber is made from the least expensive and most readily available petroleum products, it's said, and consequently it ultimately should be priced below that of other basic rubber compounds. In addition, it reportedly offers high resistance to chemicals and ozone, of which the latter makes it especially adaptable for outdoor application where weathering and aging would normally result in more rapid deterioration of present-day materials.

Ethyl Alcohol—Production of specially denatured alcohol in September was 20,190,716 gallons, bringing the cumulative total for the first three months of the fiscal year to 65,383,526 gallons, against

Organic Chemicals Output: September

The following figures, in pounds, represent output of specified organic chemicals in August and September, 1961, as reported by the Tariff Commission.

	September	*August*
Acetic Acid:		
Synthetic	63,816,423	67,967,281
Natural (wood distillation)	1,210,000	1,616,000
Acetic anhydride	105,042,509	93,301,025
Acetone	66,456,537	52,871,092
Acrylonitrile	17,180,198	18,886,517
1-3 Butadiene (Rubber grade)	151,894,367	151,622,622
Carbon disulfide	43,981,862	43,430,786
Carbon tetrachloride	31,442,924	33,294,927
Ethanolamines (Mono, di-, and tri)	9,655,131	9,499,431
Ethyl acetate (85 percent)	7,246,159	4,603,900
Ethylene glycol	87,685,753	99,303,684
Formaldehyde (37 percent by weight)	155,531,726	154,885,320
Methanol:		
Synthetic	151,256,270	169,145,097
Natural (wood distillation)	484,720	796,800
Pentaerythritol	5,234,557	5,013,358
Perchloroethylene	15,521,294	19,231,179
Propylene glycol	10,675,143	15,346,442
Trichloroethylene	27,979,252	26,195,414

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Aliphatic Organics

73,870,171 gallons in the comparable period a year earlier.

Withdrawals of SDA in September were 18,935,765 gallons. The July-September total was 65,595,657 gallons, compared with 72,500,487 in the same period in 1960.

Stocks of SDA at September's end amounted to 6,358,332, up from 5,064,991 thirty days earlier and 5,311,909 a year earlier.

Production of completely denatured alcohol was 72,911 gallons in September, while withdrawals were 68,752. At month's end, stocks amounted to 25,155 gallons.

Output of completely denatured alcohol for the first three months of the fiscal year was 164,040 gallons, compared with 133,736 in the same period a year earlier, while withdrawals were 174,817 gallons versus 132,089.

Molasses—Puerto Rican shipments of blackstrap molasses to the US mainland totaled 2,916,707 gallons in July compared to 3,682,713 in June and 5,272,072 in July last year. This brought Puerto Rican shipments in the first seven months of 1961 to 25,647,308 gallons as against 16,836,348 in the same months a year earlier.

Feeding cane molasses markets declined in the Gulf and Midwest at a slower rate during the week ended November 28 than in preceding weeks. Demand improved slightly as the approach of colder weather brought increased feed requirements for livestock, Agricultural Marketing Service noted.

Sucrose—The ban on imports of Cuban sugar has been extended until June 30 by President Kennedy. It was slated to expire on December 31.

Production of sugar beets is estimated at 18,280,000 tons as of November 1, according to the Crop Reporting Board. This is down 500,000 tons from the October 1 forecast, but 1,859,000 tons above 1960. Sugarcane production forecast is unchanged from a month ago (9.3 million short tons).

Harvesting of sugar cane is progressing rapidly. Over half of the Louisiana crop has been harvested and yields are reported to be generally good.

Vinyl Chloride Monomer—Price advances, averaging slightly less than 2c. a pound, are slated to go into effect on January 1 for 300 polyvinyl chloride formulations. Announcement of the impending action was made last week by a leading manufacturer.

The question is now will industry-wide realignment of schedules take place. Two factors suggest not: overcapacity and the aggressive marketing climate.

The positive argument is rising costs, and it would seem moreover that this will be the over-riding consideration. A precedent was set by the ½c. a pound increase in the monomer price on November 1, and at that time industry sources saw the move as the initial step in firming up the entire vinyl market.

JFK Tariff Plan

—Continued from page 3

itself and that increased trade may or may not be desirable, depending on the conditions of the trade.

- Realize that the free trade theory will work only under idealized conditions and that we should seek to develop the proper conditions before trying to apply free trade.
- Seek to adjust dollar exchange rates on a free market basis to return our producers to a competitive basis relative to foreign competitors.
- Maintain reasonable control of imports to protect American jobs and permit a gradual, not a panic, adjustment to new foreign industrial might.

In New York, Dr. Lloyd's boss, Dow chairman Carl A. Gerstacker, sounded a call to battle "to preserve American jobs."

Mr. Gerstacker, who is president of SOCMA, told that organization that the Kennedy foreign trade program amounts to a squandering of the nation's economic strength.

Rather than sweeping duty cuts, he believes that American industry needs "a handicap—or tariff—to equalize foreign advantages in taxes, depreciation, labor rates, etc."

This, he says, is particularly so for the synthetic organic chemicals industry, which is "doing poorly." Here's how Mr. Gerstacker pictures the industry's plight:

"Our rate of growth is not accelerating. Hard core unemployment is increasing.

"The picture improves when we recover from recessions, but each recession or business pickup has a higher percent of unemployment than the previous one.

"We are getting less competitive in the cost of production all the time. The root of the evil is that we are overpaying ourselves. This reduces employment, hurts production and weakens America competitively."

On top of this, Mr. Gerstacker points out, chemical prices are dropping and chemical patents are in jeopardy—two factors which discourage expansion.

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British Drug Producers Holding Out on Cost Data

The British Treasury has told the watchdog Public Accounts Committee of Parliament that UK drug companies so far have declined to furnish all the data on advertising and sales promotion costs requested by the Ministry of Health and that a second request for the information has been made.

The ministry is also going to continue, and possibly extend and amplify, its studies of drug company profits, "where trading results show an apparently high rate of profit."

There is some doubt, though that the ministry will be able to develop a standard "profit gauge" by which to judge all firms because of the divergences in a developing industry.

On advertising and sales promotion costs, the industry has submitted data on the cost of direct mail promotion and free samples.

For other costs, the industry has told the ministry that the only item on which it can calculate a total figure is that for door-to-door "detail men" representation.

Such a figure would be "misleading," the companies argue, because these representatives carry on other functions which the industry would not describe as sales promotion.

Chemical Industry Told

—Continued from page 5

nese output of sulfuric acid—the industry's yardstick—as already 10 percent of US production. In addition, he notes, the Chinese recently have been trying their hand at such sophisticated chemicals as silicones and epoxy resins, chlorinated rubber, polyethylene, nylon and catalysts.

On the Soviet threat, Dr. Ralph Landau, executive vice-president of Scientific Design Company, New York, points out that Russia in recent years has been avidly shopping abroad for technology and that this technology will probably be used as a club to break into world chemical markets.

Emergence of Russia as a factor in chemical trade will spur the already breakneck pace of new mergers and combination in the West, Dr. Laudau believes.

In Europe, he says, there will also be an accelerated conversion of the chemical industry to a petrochemical base using natural gas as well as petroleum.

Among long-term forecasts, Dr. Landau sees the Common Market countries as represeting "an even larger potential consumption" than that to be found in the US.

Surplus Capacity Seen

In addition, he says, the current transformation of the European economy will result in surplus capacity, "with attendant price weakness and increasing market research and sales effort."

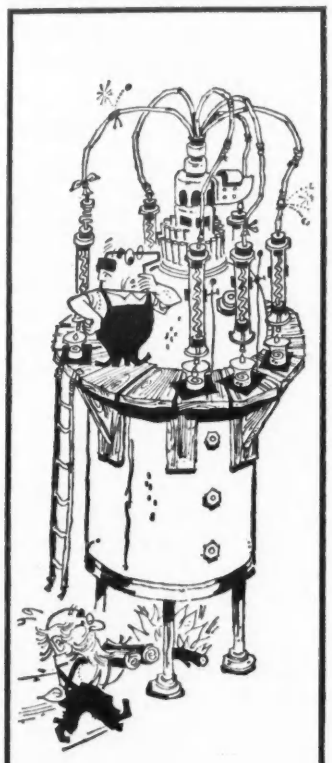
The prospect of more pressures on profit margins was raised at the AIChE meeting by C. S. Polachi, of Columbian Carbon International, Inc., New York.

Such pressures are seen coming both in the domestic market and abroad. Confining himself to the overseas situation, Mr. Polachi points to five marketing problems. These involve price, packaging in weight units suitable to the foreign area, shipping methods, technical service and the language used in technical literature.

But a more general problem, he says, is created by a frequent attitude of American producers in which exports are regarded as a last resort for materials which are in oversupply here.

However, he notes, "time and pressures are causing a change in the American attitude." On the one hand, US producers are recognizing the need to trade for survival, and abroad, foreign markets are showing increased stability.

Mr. Polachi says that despite troubles abroad, "there is still a distinct advantage to American products in many markets today. American products are recognized for their quality, for their advances in technics, in processing."



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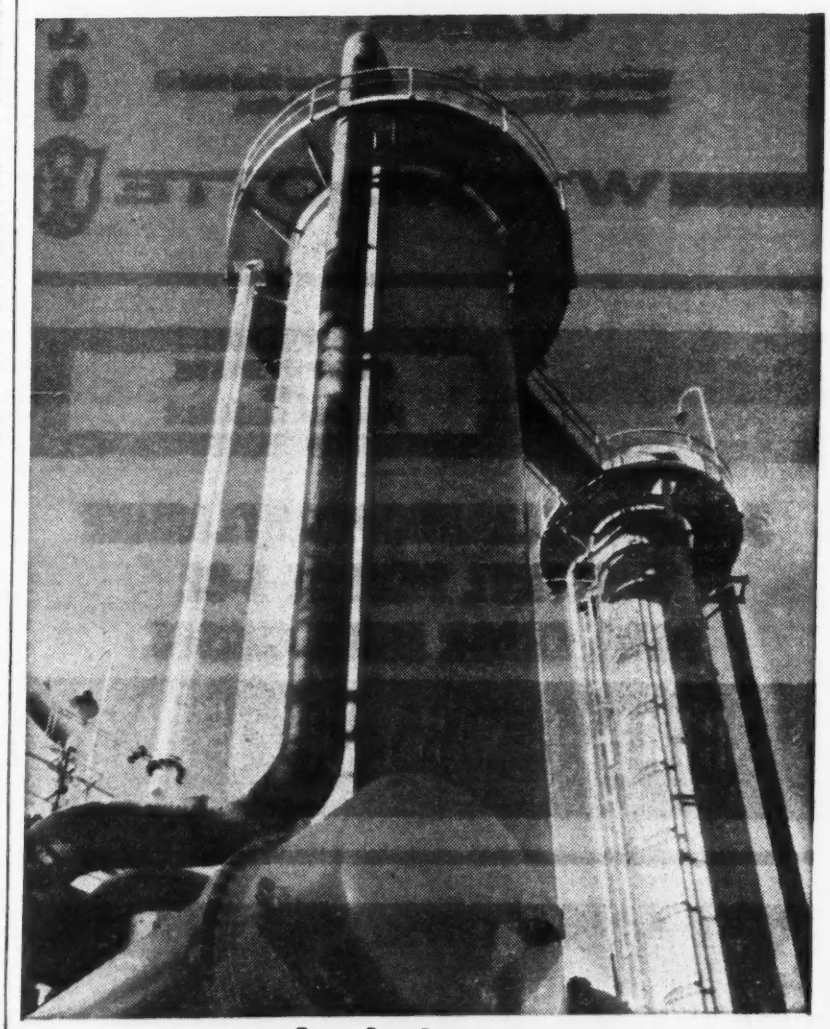

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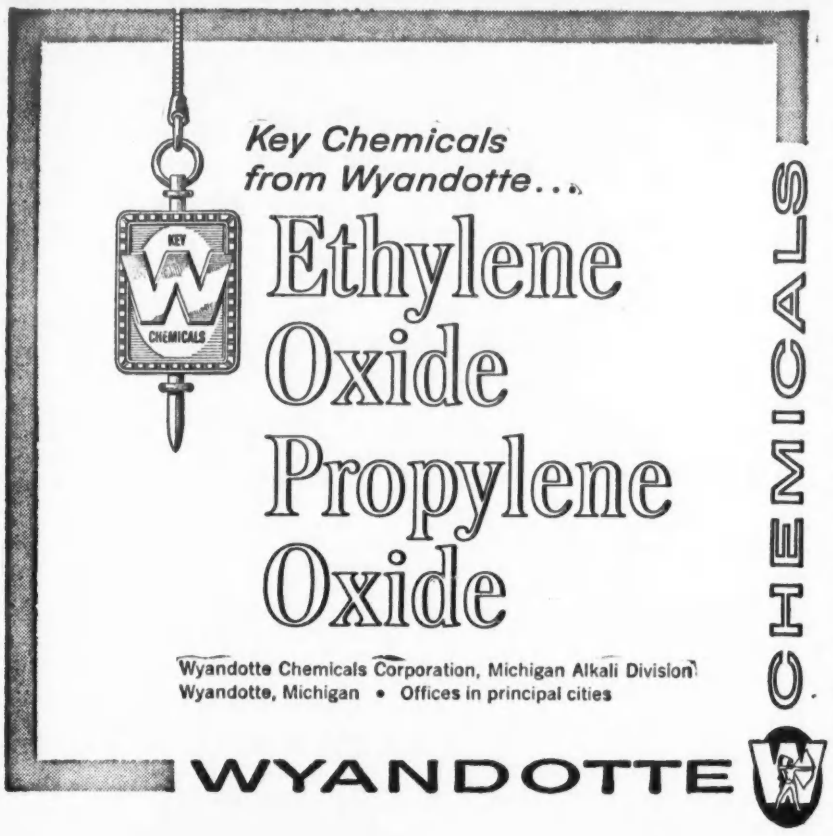

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Pharmaceutical Firms and Kefauver

—*Continued from page 3*

scientific opinion was unanimous, or even preponderant, in supporting the effectiveness of a drug, he said.

Mr. Kefauver expressed agreement with this view.

The senator also commented favorably on an objection of Mr. Beesley to a provision of the bill requiring HEW to publish and distribute a list of drugs "having the potentiality of particularly serious, dangerous or harmful effects."

When he pointed out that practically all useful drugs have effects which "may" be serious under some conditions of use, Sen. Kefauver conceded that Mr. Beesley "has a point here."

When Mr. Beesley said that industry should be allowed to retain its right to determine generic names for ethical drugs, Sen. Kefauver said he never intended that FDA should ever have more than standby authority in this area—to determine the names when voluntary efforts by industry break down.

Settlement of Patent Disputes

Finally, with respect to agreements made in settlement of patent cases, which the bill proposes to ban as a violation of the antitrust laws, Mr. Beesley suggested that instead of such agreements being automatically outlawed, that they be filed for inspection at the Patent Office.

These agreements, he explained, are not all necessarily bad; in fact, they often foster competition by making it possible for two or more companies competing for sales of the patented product instead of the single company which ultimately wins the litigation.

Sen Kefauver agreed the alternative is one "which we should all consider."

Mr. Beesley's lengthy statement to the committee outlined in general terms the industry's objections to the bill and what it feels is needed in the way of new legislation.

Witnesses who followed him on the stand hammered at the patent restrictions proposed to be imposed on the drug industry and sought to counter committee claims that drug prices are excessive and that the industry tends to monopolize.

Hitting hard at the patent provisions, which would reduce the patent monopoly in the drug industry from seventeen years to three years and bar the issuance of patents on so-called molecular manipulations unless FDA certifies that such products have significantly greater therapeutic effect than the drug so modified, were the following:

The Line-Up of Supporting Witnesses

John T. Connor, president, and Dr. Vannevar Bush, chairman of the board of Merck & Co., Rahway, N. J.; George E. Frost, nationally-known authority on patent law; Dr. Theodore G. Klumpp, president of Winthrop Laboratories, Inc., New York; Dr. Ernest Volwiler, consultant of Abbott Laboratories, North Chicago, Ill., and Dr. C. J. Cavallito, director of research of Irwin Neisler & Co., Decatur, Ill.

Dean Eugene V. Rostow of Yale University Law School questioned the premises on which the bill is based—that drug prices are too high and that monopoly exists in this industry.

Prof. Jesse W. Markham of Princeton University introduced a number of studies into the record on price relationships and the extent of competition in the industry.

Statements of a dozen or more physicians, research scientists and medical educators were filed in the record—all opposing the bill in one fashion or another.

A prediction that the bill, if passed in its present form, would cripple the drug industry's $225-million-a-year research program was made by Mr. Connor.

He said the bill would transform the pharmaceutical industry from a "dynamo of economic growth into just another rider on the coattails of progress."

"It would destroy world leadership of the United States in the discovery, development, production and distribution of new drugs," he added.

Return to Research Secrecy Feared

Echoing Mr. Connor's points, Dr. Bush warned: "Destroy the incentive of patent rights as S 1552 proposes, and you will encourage a return to secrecy for such little research as the pharmaceutical industry would then be willing to conduct."

He said that he does not think the system of providing drugs for the public is perfect; it can be improved and in particular the cost of drugs to the user can be reduced.

"But the way to do it is not to knock out the source of new and better ones," he said.

Mr. Frost forecast "catastrophic" results over the next twenty years if the US patent law is weakened for the ethical drug industry as proposed in S 1552. He said the bill would reduce discoveries of important new drugs "at least by half."

Mr. Frost attacked the conclusions in the majority report last session on the

—*Continued on page 66*

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Coating Materials

Zinc oxide producers are in somewhat of a quandary. What with the price of lead down, and the price of zinc up, producers are not sure which way to move. Leaded zinc oxides were just on the verge of reacting to the recent price declines which sent the price of lead metal to a fifteen-year low, when suddenly the zinc metal price shot one-half cent per pound upward. On top of this, lead rallied and inched its way back up one-quarter cent per pound. Betwixt and between these contradictory tendencies, zinc oxide manufacturers are trying to figure out just what exactly to do.

Only one producer has determined his course of action so far. The decision amounts to dropping his prices on leaded zinc oxides. The reductions range from one-quarter cent to three-eighths of a cent, depending on the percentage of lead contained in the pigment.

Other producers, however, are sitting tight, biding their time. One reason for holding back is the obvious one—leaded pigment demand for the coming months is not such that it will matter too much one way or the other.

Whether or not other producers meet the new prices, sales are not expected to profit much by it. The one producer who is featuring the reduced price schedule, does not report an increased volume of sales as a result. Demand is pretty well stabilized at this time of the year, and this serves as a further incentive to producers to hold back on a price change for the balance of December, anyway.

Lead-free zinc oxide is not affected by the rise in price of zinc metal, nor did it suffer along with the single producer's reductions of leaded oxides.

Zinc dust, on the other hand, responds more or less automatically to the metal price change. Prices were adjusted one-half cent upward along with the metal.

In other areas of the coatings market there is also activity. The war of nerves continues in the effort to establish stabilized prices for cellulose acetate and polystyrene. Two attempts to increase prices have been withdrawn by leading producers. The price war in polystyrene has sent prices down to such an extent that profit margins are all but negligible, it is reported.

Price Trends

Advanced
Zinc dust, ½c. per lb.

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
103.44	103.44	103.13	103.15

For Current Prices See Page 11

Prime Pigments

Carbon Black—Production of carbon black during October—set at 165,698,000 pounds—was 7.2 percent above October 1960, says the Bureau of Mines. Shipments were up by 13.8 percent from October a year ago, while stocks rose a mere 2 percent. As compared with the month previous, stocks were down 13,000,000 pounds, or 5 percent, on October 31.

Zinc Dust—Price of zinc dust is advanced ½c., producers announce. Normally predicated on the metal price, zinc dust pigment took a swing upward immediately following the announcement of the 5c.-per-hundredweight increase in the price of zinc metal. This makes the new carlot price 16c. per pound.

Zinc Oxides—Thus far, only a single producer has moved to reduce his prices on leaded zinc oxides. Other producers may soon follow suit, it is reported. At present they are merely waiting it out to see which way the situation will break. The reductions on the part of the one producer amount to ¼c. to ⅜c. per pound, depending on the grade. Lead-free material is not affected.

Synthetic Resins

Polyvinyl chloride film is slated for a price advance on the first of the year, but reports have it that the resin price will not be affected. Only one producer has made the move to hike prices thus far. Others, however, may soon follow. The vinyl chloride monomer from which PVC resin is derived, recently saw a ½c.-per-pound price increase.

Attempts to up the prices of cellulose acetate and polystyrene have been rescinded, it is announced. Prices have stabilized themselves at the lower level.

The following preliminary figures issued by the Tariff Commission show production of synthetic resins in pounds for September, as compared with production figures for the previous month:

Production

	August	September
Phenolic and other tar acid resins:		
Molding resins	17,823,353	17,409,695
Laminating resins	7,659,082	7,409,672
Protective coating resins, modified, unmodified, except by rosin	1,727,702	1,648,242
Urea and melamine resins:		
Protective coating resins, straight modified	3,723,491	3,376,295
Styrene resins:		
Protective coating resins, straight modified	5,386,409	6,135,951
Vinyl and vinyl copolymer resins:		
Total all types	107,384,457	101,100,388
Alkyd resins for protective coatings:		
Phthalic anhydride types:		
Unmodified	23,057,654	20,652,686
Modified with tar acid, rosin and or other material except styrene.	7,743,093	7,890,348
Polybasic acid types except phthalic:		
Unmodified	718,954	1,230,840
Modified with tar acids, rosin and/or other materials except styrene.	771,106	874,156
Rosin modification for protective coating:		
Rosin, rosin esters, unmodified (ester gums):		
Esterified with glycerol	1,043,030	953,614
Esterified with other alcohols, pentaerythritol, glycols, etc.	618,950	679,701
Modifications with phenolic and other tar acid resins	1,528,621	1,964,516
Modifications with maleic and fumaric acids	2,283,055	2,579,744
All other modifications	4,553,685	5,213,287
Coumarone-indene and petroleum polymer resins	21,561,934	20,422,384
Miscellaneous synthetic plastics and resin materials	25,242,267	24,598,853

Miscellaneous Materials

Casein—Prices are mostly unchanged. Offerings of Argentine continue on the light side, with prices ranging from 18⅝c. to 19¼c., mostly at 18¾c. Some offerings for early 1962 shipments are noted at 18⅜c. to 18⅝c.

Demand on the part of domestic consumers is very quiet. In a few quarters interest is picking up for February or later shipment. Practically no offerings of Polish or French are reported.

Slightly increased offerings of Australian were evident, however, at 20c. to 20¾c., mostly 20c. to 20¼c. for spot sale, and 19¾c. to 20c. for future shipment.

New Zealand is still at 24c. to 25c., and moving to normal outlets.

Naval Stores

A generally firm price structure governs the market. In the face of a further drop in sales, only slight price

Coatings Sales and Output: October

	Reported Sales Dollars		Reported production Gallons	
	October	September	October	September
Trade Products, total	$90,870,000	$92,100,600	25,800,000	26,900,000
Paints and Varnishes	86,900,000	88,700,000	25,200,000	26,300,000
Lacquer	3,400,000	3,400,000	600,000	600,000
Industrial Finishes, total	62,800,000	62,000,000	25,600,000	26,500,000
Paints and Varnishes	46,400,000	46,900,000	18,600,000	20,200,000
Lacquer	16,400,000	15,100,000	7,000,000	6,700,000
Overall Total	$153,100,000	$154,100,000	51,400,000	53,800,000

Total sales—Jan.-Oct.: $1,620,900,000.

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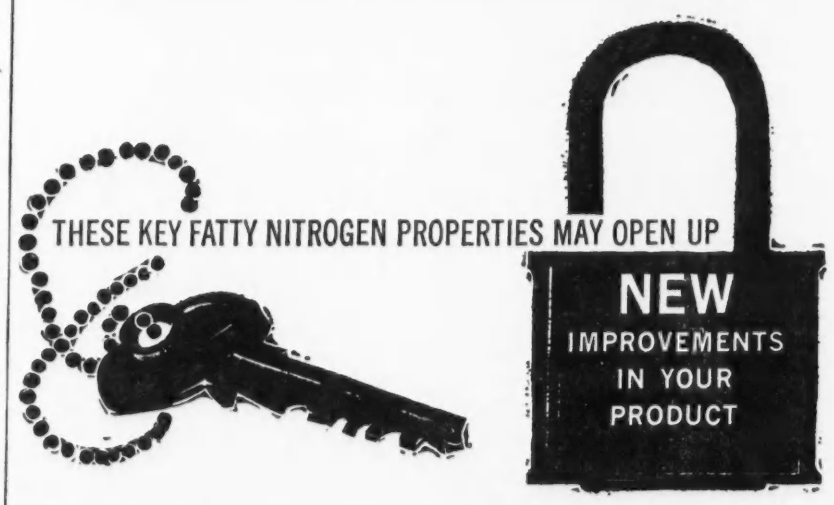

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Coating Materials

movements were recorded in gum rosins. The loan program continues to take a sizable portion of both processed and unprocessed rosins.

Rosin overall sales in the week ending December 1 were 1,631 drum equivalents, compared with 1,902 the week previous and 2,769 the week ending November 17.

Sales, f.o.b. plants, prompt, drums WW $12.10, WG $11.90 to $12.13, Nancy $12.25, M and below $11.65. Tankcars M and below $11.25. Bags WG $11.55, M and below $11.30.

Average price paid producers for commercial pine gum in the week ending November 25, was $30.80 per barrel, 10c. per barrel more than the two weeks previous. Loan price for the week was $26. Volume of gum delivered during the week was 17,896 barrels (including 13,117 loan).

Average barrel content: turpentine 8.07 gallons, rosin 296.3 pounds. Gum grading: 5 WG, 16 N, 63 M, 16 K and below.

Coating Materials Briefs

PRICE INCREASES WITHDRAWN: Polystyrene price increases, scheduled by Dow Chemical Company during recent months, have been withdrawn, a company spokesman announces.

The price schedule for "Styron," Dow polystyrene, returns to the level of January 30. Under this schedule, the bag price of crystal general purpose "Styron" is 18c. per pound.

Dow has reportedly not changed its convictions on polystyrene pricing. The spokesman says, "We are continuing to examine how the mutual idea of each of us to maximize profits can best be reconciled with your practical needs."

BETTER FINISHES MOVES: Better Finishes & Coatings Company has moved to new quarters at Broad Street and Hepburn Road in Clifton, N.J. The telephone number is PRescott 3-6310.

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Drugs, Fine Chemicals

Higher prices on silver salts, which were anticipated immediately following President Kennedy's announcement that he had ordered the Treasury to discontinue sales of free silver as a first step toward making silver a free market, have yet to materialize. Spokesman for a major producer of silver cyanide and silver nitrate indicates, however, that a new schedule is in the writing and an announcement is imminent. Prospect is that the changes will be effective on January 1, requiring that customers get the word by Friday (December 15).

Affected by the changes in silver salt prices are users in the photography, pharmaceutical, and silver plating industries. Last year their requirements amounted to more than 2 million ounces of cyanide and 75 million ounces of nitrate, much of the latter being used captively for sales were only 32 million ounces. Output of both chemicals has been trending upward.

Requirements for the majority of drugs and fine chemicals are seasonally large and production of those items usually given a spurt by cold weather demands has responded. September statistics, just issued by the Tariff Commission, show big output increases over August for ascorbic acid, penicillin salts and sulfa drugs.

In practically all areas, though, competition is intense and producers reportedly are trying hard to maintain prices and profits at current levels. Situation apparently got out of hand in two markets, however, for prices on citric acid and vitamin E were cut substantially last month.

General Services Administration has sold 1,680 ounces of hyoscine to a New York firm for $10.75 an ounce. Bids submitted by four other parties ranged from $6.30 an ounce down to 12 cents an ounce, a surprising spread in as much as the spot quote on the hydrobromide salt was recently reported at $15 an ounce.

Ascorbic Acid—Demand is large currently and it's expected that a good gain in production will be recorded for all of 1961. At the same time, however, profits are lower because of the several, successive reductions posted this year.

At today's prices, the market is said to be relatively stable though here as in the vitamin area generally, selling efforts are extremely aggressive. Imports are said to be an unsettling influence at times, but domestic competition is apparently the more significant factor.

Citric Acid — Encountering increased competition both here and abroad, a leading maker of citric acid and derivative chemicals posted lower prices on these products in mid-November. The reductions were as much as 10 percent of the then official selling prices.

An innovation in the new schedule is that hydrous and anhydrous granular citric acid are quoted at the same levels: 27c. a pound in carload lots of 100-pound bags, 27½c. a pound for a similar quantity in 250-pound drums. Previously, anhydrous cost an additional 2c. a pound.

It's believed that new production of citric in Mexico is hurting exports to the South American market. It's also reasonable to suspect that competition among citric makers as well as with manufacturers of similarly-used chemicals has generally led to price weakness.

As a result of the drop in citric, lower prices were also established for ammonium citrate dibasic, potassium citrate, sodium citrate anhydrous and sodium citrate USP. Reductions ranged from 1c. to 2½c. a pound.

Other than hurting profits, the lower schedule on citric is unlikely to have any immediate effect on the market. Demand is and has been large and prospects for continued growth in both food and industrial applications are excellent.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
58.60	58.60	58.89	59.27

For Current Prices See Page 11

Hyoscine—A leading botanicals and alkaloids dealer in New York has just purchased 1,680 ounces of hyoscine from General Services Administration. The firm's $10.75 was the successful bid.

Other bids ranged from 12c. an ounce to $6.30 an ounce, a spread which indicates that some in this business either don't know the score or thought that they would be the only bidders.

A trade report last month indicated that hyoscine hydrobromide was selling at $15 an ounce. It's believed that demands for export are pretty good although domestic requirements are limited.

Silver Salts—Prices are definitely going up but by presstime last week, a major manufacturer of both silver cyanide and silver nitrate was still puzzling over the projected schedule.

After a 10c. advance in the price of silver two weeks ago, following President Kennedy's announcement that he had ordered the Treasury department to discontinue sales of government free silver, silver went up an additional penny last week, to $1.01¼ an ounce.

Production of both silver nitrate and silver cyanide has been trending upward in the past several years. In 1960, output of silver nitrate was 75.5 million ounces, up 2 million ounces from 1959, while output of silver cyanide was 2 million ounces, up about 100,000 ounces from 1959.

Sodium Gluconate—Sodium gluconate is quoted at 30c. a pound in drums and 29½c. a pound in bags for a carload quantity. Set up by a reduction early last month, the lower schedule coincides with the entrance of a new producer into the market.

Vitamin E—Prices on vitamin E are down and, according to trade sources, the factors behind the decline were domestic competition and imports.

Buyers got word of the lower schedule on November 1, and a week or so later, one supplier issued an official release on the action. It is apparent, of course, that the cuts were eventually made industry-wide.

Botanicals

Agar—General Services Administration has sold 13,600 pounds of agar to a New York-headquartered firm for 61c. a pound. This was the highest of three bids received by the agency.

Imports of agar dropped to 608,483 pounds in 1960 from 761,492 a year earlier. Lack of offerings rather than a decline in use is thought to explain the decline.

Generally, the trend in imports has

Drugs and Fine Chemicals Output: September

Following statistics for selected fine chemicals and drugs were compiled by the Tariff Commission. Figures relate to the production of bulk material only.

		September	*August*
Acetylsalicylic acid	lbs.	2,040,401	2,041,074
Ascorbic acid and salts	lbs.	557,364	*461,851
Dihydrostreptomycin	gms.	—	12,035,773
Niacin and niacinamide	lbs.	213,897	367,251
Penicillin salts	million-units	75,780,723	49,814,664
Phenobarbital	lbs.	—	—
Pyridoxine	lbs.	—	—
Streptomycin	gms.	23,149,432	24,284,754
Sulfa drugs	lbs.	345,582	276,453
Tetracycline	gms.	19,543,300	—
Thiamine derivatives	lbs.	—	—

A dash (—) indicates data not reported.
* Revised.

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Drugs, Fine Chemicals

been upward. In 1955, 418,516 pounds were brought in and 1956 volume was 522,606 pounds. A dropoff occurred in 1957 but until last year, imports increased—as much as 300,000 pounds in 1959.

Cantharides—Prices were recently advanced, the quote on the Chinese variety going to $1.50 a pound from $1, while Russian material (so-called) went to $1.75 a pound from $1.15. Despite only limited demand here, the higher schedule was reportedly made necessary by higher replacement costs.

Colchicum Seed—Little or no colchicum seed is available on spot and there's no immediate prospect, according to reports from the trade here, of new offerings.

Supplies have been tight throughout the past year and prices have been correspondingly high.

Pink Root—Stocks of pink root are getting lower all the time so a further price increase is not to be ruled out. Current selling price is about $2.50 a pound, f.o.b. New York, up from the previous $2.25.

Serpentaria Root—Quote is $7 to $7.50 a pound and strong. Higher than normal prices reflect a generally tight supply situation which has prevailed this season.

Drug & Fine Chemical Briefs

DATA OFFERED: Chemical Sales Division of Chas. Pfizer & Co., New York, is ready to issue a special data sheet on zinc bacitracin. The antibiotic is reported to have two advantages over bacitracin: greater stability and better taste. It is used in ointments and troches and is available either as a fine powder or in micronized form.

MERCK STARTS UP UNIT: Manufacturing operations in Lima, Peru, have been started by the Merck Sharp & Dohme division of Merck & Co., Rahway, N.J. The plant, Merck's answer to a recent Peruvian law requiring that final stages of pharmaceutical products manufacture be conducted locally, is turning out vitamins, corticosteroids and antibiotics is slated.

REPORTS TO CONTINUE: Reports developed through the Abbott Laboratories Prescription Survey will be continued after 1961 through R. A. Gosselin & Co., Boston. Retirement of the Chicago firm's director of market development and organizer of the survey, David D. Stiles, necessitates the new arrangement.

Titanium Smelting

—Continued from page 7

a smelter producing titanium slag and pig iron at Sorel, Quebec, Canada.

National Lead's subsidiary, Titania A/S, has operated ilmenite mines in Norway for over thirty years. Mining and milling operations at the Tellnes ore body, which is estimated to contain 100 million tons of recoverable ilmenite concentrate, began in October of 1960.

National Lead Company, a leading producer of titanium pigments in the United States, also manufactures these pigments in Canada, West Germany and Belgium.

IN NEW POSITION: John F. Shanklin, elected a vice-president of Union Carbide Corporation, New York. He wil continue as the concern's secretary.

Gulf Sets Construction Of Refinery in Holland

Gulf Oil Corporation has made plans to build its second refinery in Europe at the Europort, Rotterdam, Holland. Gulf's first European refinery is now under construction at Stigsnaes, Denmark.

Capacity at the Europort facility will be 1.5 million tons a year, or 30,000 barrels a stream day. A substantial portion of the output will be used to supply Gulf's Dutch and Belgian markets, and the remainder will be exported.

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OPD Reports From Europe

'United States' Sounds Like 'Dumping'

—Continued from page 5

East Germany, however, does look slightly ominous to some other European producers.

Price-cutting in synthetic rubber, if it does come, is anticipated mostly on "diene" rubbers. The recent cut by Shell Chemical Company in the US on its polyisoprene to 23 cents a pound from 25 cents in considered significant in Europe.

In Britain, the government Board of Trade has notified UK importers of US polyethylene that it is formally considering the application for an anti-dumping duty made by Imperial Chemical Industries, Ltd., joined by Monsanto Chemicals, Ltd., and Union Carbide, Ltd.

Significantly the board adds that it will also consider extension of the anti-dumping duty to other countries. This is considered a clear reference to Italian producers. Some shipments from Italy reportedly have come into Britain at 14 cents a pound before duties.

The Board of Trade official announcement means it has found a prima facie case of dumping in the facts presented by the applicant firms. No added duty can be imposed, however, until objections have been heard. Other interested parties had until Friday (December 8) to make these in writing.

Calculation Method Galls Producers

What is particularly galling to British and continental producers is that the US tariffs on organic chemicals and plastics are said to be 40-50 percent calculated on the domestic list price not on the export invoice price.

According to J. C. Hanbury, chairman of the Association of British Manufacturers, writing to London's *Financial Times*, this results in "duties of up to 100 percent to 120 percent ad valorem if calculated on the shipping price."

The effect, in the European view, is to make the US one of the highest chemical tariff countries in the world and this adds to the bitterness of the charges of dumping by American firms.

A somewhat sympathetic view of this plight is being taken in the headquarters of the Common Market where organic chemicals and some other chemical products are being excluded for the moment from the Common Market's offer under the General Agreement on Tariffs & Trade to cut its external tariff barrier by 20 percent across the board.

This offer on chemicals and a few other products is now being made conditional on substantial duty cuts by the US.

Perkins Glue Sticks On

—Continued from page 7

formaldehyde, which are major adhesive components.

The added technical, research and financial resources which Spencer can make available to Perkins should enable it to expand substantially in the adhesives industry, the Kansas City firm says.

Perkins' general office and largest plant are located in Lansdale. Five other plants, all in or near furniture, plywood, or chipboard manufacturing centers, are at Shawano, Wisc.; High Point, N.C.; West Memphis, Ark.; Alexandria, La., and Kitchener, Ontario, Canada.

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Essential Oils, Aromatics

After months and months of waiting for sandalwood prices to come down and continued reports that the source market is weak, now comes the word that the December auctions have been postponed. Sketchy reports indicate that these auctions were postponed at the request of the buyers. Material on spot remains high-priced and scarce. Spot prices and supplies never reflected the weaker tone at source and, as yet, spot prices have not reflected the firmer tone brought about by this delay of the auctions. They may be rescheduled for January or for as late as March. Bourbon geranium continues firm following reports of drought conditions in the oil producing regions.

Sales of toilet preparations in Canada during 1960 as compiled from reports filed with the Dominion Bureau of Statistics, totaled $163 million compared with $145 million in 1959. Most all of the major Canadian manufacturers and distributors of toilet preparations reported to this survey.

In all, 81 firms furnished reports and it is estimated that this group accounted for at least 95 percent of all toilet preparations sales in Canada.

Firms reporting to this survey were asked to report their sales on the basis of 'suggested retail selling price' so that the total reported approximates, in effect, the retail sales value of all toilet preparations sold in Canada.

On the basis of sales value, the most important product sold in the line of toilet preparations in 1960 was hair preparations valued at $29 million as compared with the 1959 figure, $25 million. Next were the dentifrices at $23 million compared with $21 million in 1959.

Other large sellers were shampoos at $12 million as compared with the 1959 figure, $10 million. Colognes and toilet waters were valued at $11 million in 1960 as compared with $9 million in 1959. Lipstcks were valued at $9 million in 1960 and $8 million in 1959.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
143.53	143.53	142.46	145.51

For Current Prices See Page 11

Essential Oils

Cassia—It is pointed out by the Food and Agriculture Organization of the United Nations that the essential oil of cassia is similar to that of cinnamon bark but that cassia is used less because of its decidely unpleasant after-taste.

Currently, cassia is selling for $6.50 per pound and cinnamon bark for $64 per pound with some listings running much higher.

Cassia is the bark of the tree Cinnamonum Cassia of the Lauraceae family. There are at least three types of cassia known in the trade. The Chinese cassia is the bark of the above-mentioned tree. The Saigon or Indian cassia is more difficult to define as at least four species of Cinnamonum are found in the wild state in Indochina, all yielding aromatic barks.

Annamese cassia is valued most, the best quality of which is called "Royal Cinnamon." Batavia cassia, often called Cassia vera, or Padang cinnamon, is mainly derived from Cinnamonum Burmanni, produced in Sumatra.

The cultivation of cassia is similar to that of cinnamon. The bark is coarser and thicker than that of cinnamon, and is inferior in appearance. The taste is cinnamon-like but less fragrant and delicate and sometimes slightly astringent.

Cloves—Both the leaf and the bud oils are reported moving in good volume with prices steady. The leaf oil continues at $1.10 per pound and the bud continues at $2.55 per pound.

Statistics show that per capita consumption of cloves ranges between one and seven grams in most countries of the world except in Indonesia where it is over 150 grams per head.

Indonesian consumption is out of all proportion to that of any other country, due entirely to their practice of mixing cloves with tobacco which, despite efforts to introduce it elsewhere, remains unique in the world. This note is from the Food and Agricultural Organization of the United Nations.

Consumption of cloves has fallen everywhere since the thirties except in France and Indonesia, but the increase both in consumption per head as well as in the consuming population in Indonesia has more than compensated for losses elsewhere.

Even so, demand in Indonesia is held down by import controls. It is estimated that consumption per head would be 10 to 20 per cent higher if imports were fully liberalized and increased supplies were forthcoming.

Apart from Indonesia, the next highest consumer is India, where cloves are a popular ingredient in spice mixtures.

Indian consumption is, however, well below her pre-war consumption, partly as a result of import restrictions, but it has remained fairly stable in the fifties.

In the West, the development of consumption has not been uniform. In the United States, the United Kingdom and Canada, consumption per head in the early fifties was below pre-war consumption, and tended to decline still further in the late fifties.

In Germany and Holland the fall from pre-war consumption was still greater but there are signs of recovery.

Consumption in France rose above pre-war consumption but is still only half that in most other European countries.

There appear to be large areas—South America, the Soviet bloc, China—where cloves are hardly consumed at all.

Geranium—Bourbon material is firm due to the drought that has affected plantings. Spot prices, however, have not advanced.

Production of the oil is just getting underway and will continue until March, according to reports from source. The crop is expected to be a large one and prices should come down further unless the drought does a lot of damage or cyclones strike growing areas.

News sources point out that the cyclone season is January-February.

Shipment figures show that large quantities of material left Reunion during 1961. From January to November, 143 tons of oil were exported compared with the average export over the past 5 years of 80 tons.

Because of this heavy outpouring of material, there is very little oil at source now. Buyers will have to wait for new crop material.

Lemon—Spot prices remain unchanged according to reports from essential oil dealers in the New York area. New crop material is expected to arrive on spot around mid-February.

From printed sources, we learn that some 5,000 acres of lemons are planted in Florida. It is estimated that two-thirds of these trees are bearing fruit and that the remainder will bear in a few years.

This material is harvested in early and middle October. Processors generally manufacture concentrated lemon juice in October and November. They store it frozen in drums until late spring or early summer and then they convert it into lemonade or other products for the consumer.

Lemongrass—News from source is that the market is a little easier. Material on spot remains high-priced and scarce. Dealers continue wary of replenishing their stocks.

Lemongrass is distilled for its oil in many parts of the world including Kenya, Tanganyika, the Congo area, Angola, Equatorial Africa, Madagascar, the Comoro islands, Guatemala, Honduras, the Dominican Republic, Haiti, Jamaica, Puero Rico, Argentina, Brazil, Surinam, Formosa, Indonesia and Malaya.

It has been estimated that some 1,500 metric tons of the oil are produced annually.

The hot dry season has just begun in the East Indies. During this season the plants develop and the leaves and stems shrivel up.

The root, however, remains alive. More rains will come in March or April and the plant will develop a new life. It will then

Essential Oils

begin to flourish and cutting can be begun once again.

Before the arrival of the new rains, the dry grass is sometimes burned to fertilize the soil and strengthen the plants. But in times of high prices, the grass is not burned. Some growers feel that this burning has a detrimental effect on the later growth of the plant and also on the yield of the oil.

Throughout the life span of most plantations, the plants are weeded. When prices are low, however, no one bothers to do the weeding. The result is that the planation is soon overgrown with weeds and becomes less valuable.

Sandalwood—The source market is firmer, following word that the Madras auctions have been postponed.

It is not known exactly why the December auctions have been postponed, but one news source said it was at the request of the buyers.

They will probably be held early next year—perhaps as late as March.

This word of a firm source market has had very little effect on spot. Spot prices had never felt the impact of the weak source market. Prices remain at and above the $27 per pound level. Material remains scarce.

Seeds and Spices

Anise Seed—Mexican material has advanced from 35 cents per pound to 38.

Cardamon—Guatemala decorticated material has dropped in price from $2.40 per pound to $2.38; Guatemala green has dropped from $1.80 per pound to $1.75, and Alleppey green has dropped from $1.90 per pound to $1.80.

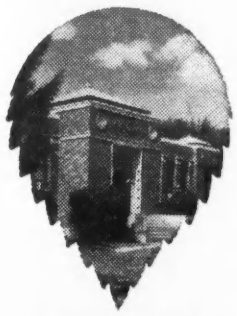
Cloves—Zanzibar material has advadvanced from 38½ cents per pound to 39 cents. Madagascar material has advanced from 37 cents per pound to 37½ cents.

Ginger—Cochine material has dropped from 30 cents per pound to 27 cents. Nigerian split has dropped from 30 cents per pound to 29 cents.

Pepper—The various grades of pepper are generally firm. Malabar black and Lampong black both rose from 37½ cents per pound to 38½ cents; Brazilian white continues at 49 cents; Muntok white advanced from 50 cents per pound to 51 cents, and Brazilian black advanced from 36½ cents per pound to 37 cents.

Saffron—Mancha superior advanced from $19.50 per pound to $20 per pound and Mancha advanced from $21 per pound to $22 per pound.

Savory—Spanish material rose from 15 cents per pound to 18 cents.



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Alpco 16	Black-Brown	188	48	112
Alpco 20	Dark Amber	186	50	105
Alpco 400	Amber	181	54	100
Alpco 431	Light Amber	183	46	112
Alpco 434	Yellow Amber	185	41	120
Alpco PX-100	Black-Brown	187	42	113
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Oils, Fats and Waxes

Feature of the oils and fats market last week was the announcement by the government to purchase 200 million pounds of cottonseed and soybean oils December 20 for distribution to the needy people abroad. This strengthened both oils and prices were fractionally higher. Scarcity of peanut oil also stiffened prices and light sales took place at 1 cent higher. While other edible oils were stronger, corn oil continued to drop sharply, selling at 1½ cents per pound lower. Crude coconut oil closed firmer and shipments were raised ¼ cent.

Increased demand for tallow and greases for soapers account and export resulting in an advance of ⅛ cent per pound for all grades. Good volume of business took place at the higher levels.

Interest in industrial oils slackened, but prices were well held at prevailing levels. Tung oil was firmer, as selling pressure disappeared and limited offerings were generally maintained at ½ cent higher for prompt and later delivery. Brazilian castor oil remained firm at the recent advance reflecting the higher cost of replacements from Brazil. Linseed, oiticica, palm, rapeseed and crude menhaden oils were quiet and well held.

Oilmeals were stronger and higher because of improved demand for nearby delivery. Soybean meal was boosted $5 per ton, linseed, $2 and cottonseed, $3.50 to $4 per ton. Peanut was scarce and firm as production was nil.

The Agriculture Department requested offers for 200 million pounds of cottonseed and soybean oils for donation to needy people obroad. CCC will call for deliveries of this amount of oils during the period May 1 through September 29, 1962. Terms of purchases will be mailed for hydrogenated vegetable oil, (shortening type) in 3 pound and 50 pound containers and soybean and cottonseed salad oils in 1 gallon and 5 gallon containers. Offers must be received by 11 a.m. Tuesday, December 19, 1961 for acceptance by 4 p.m. the following day.

Price Trends

Advanced

Cocoa butter, 1c. per lb.
Coconut oil, crude, ¼c. per lb.
Cottonseed meal, $3.50 to $4 per ton.
Cottonseed oil, crude, ¼c. per lb.
Refd., ¼c. per lb.
Greases, ⅛c. per lb.
Lard, cash, ¼c. per lb.
Linseed meal, $2 per ton.
Peanut oil, crude, 1c. per lb.
Refd., 1c. per lb.
Soybean meal, $4 per ton.
Soybean oil, crude, ⅛c. per lb.
Refd., ⅛c. per lb.
Tallow, ⅛c. per lb.
Tung, ¼c. per lb.

Reduced

Corn oil, crude, 1½c. per lb.
Refd., 1½c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Dec. 9, 1960
118.59	115.61	117.02	105.10

For Current Prices See Page 11

Vegetable Oils

Castor—Firmer primary market was reflected in Brazilian oil and No. 1 for prompt and later delivery was generally held at 16¼c., tankcars, New York basis. Good demand was reported for delivery against former orders. Domestic grades were held at unchanged prices.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	200.700	3.506.000
Previous week	199.700	1.000.000
Corresponding week, 1960		2.992.000
Total this year	2.895.650	90.343.000
Corresponding period, 1960	3.503.450	85.708.000

Coconut—This market was firmer and advanced ¼c. Crude oil was sold at 10½c. per pound, tankcars, f.o.b. Pacific coast for December-January shipment and quoted at 10¾c. The New York market was quiet and nominal at 12c., tankcars, f.o.b.

Corn—Sharp declines continued to feature this market. Crude dropped 1½c. to 20c. per pound, tankcars, f.o.b. works, prompt shipment. Refined oil was lower at 23.91c., tankcars, New York, prompt delivery.

Cottonseed—Futures market was firmer, scoring fractional advances as a result of government plans to purchase 200 million pounds of cottonseed and soybean oils for donation to the needy in foreign countries. Trading was active. Hedging was liberal in March and May against crude oil purchases. Cash oils also were strengthened, advancing ¼c. Refined salad oil was raised to 16c. per pound, tankcars, New York, prompt delivery. Trading was heavy in crude and took place at ¼c. higher. Sales in the Valley were reported at 12½c. per pound, tankcars, f.o.b. mills and held at ⅛c. more. The southeast was higher at 12¾c. to 13c., as to location and at 12½c., Waco.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 8, follow:

	Sales	Cents per Pound High	Low	Close
Dec.	407	14.60	14.15	14.53@14.54
March	577	14.40	14.11	14.38 S
May	380	14.40	14.10	14.35 S
July	121	14.36	14.03	14.30@14.35
Oct.	1	13.60	13.60	13.60@13.65

Total sales and switches, 1,488 contracts.

Linseed—Market was quiet, but steady. Raw oil was unchanged at 15.20c. per pound, tankcars, f.o.b. Minneapolis, December-February; 15.40c., March-May and 16.28c., f.o.b. New York, prompt delivery.

Oiticica—Trading was limited, but the market remained unchanged and steady at 14¼c. per pound, tankcars, New York for prompt delivery. Drums ranged from 15¾c. to 16c., spot, as to quantity.

Olive—Demand on spot was moderate at a price range from $2.30 to $2.40 per gallon, drums, exwarehouse, according to quantity. Replacements were firm at $52.50 to $53 per 100 kilos, drums, f.o.b. ports, January-March shipment.

Peanut—Crude rallied and advanced 1c. to 18½c. per pound tankcars, f.o.b. mills, prompt shipment, with trading thereat. Offers were scarcer. Refined was lifted to 21¾c., tankcars, New York, prompt delivery.

Soybean—Steadier tone developed because of the government plan to purchase 200 million pounds of cotton and soybean oils December 20 for donation to needy people abroad. Crude was stronger and held at 10.40c. per pound tankcars, Decatur, unrestricted for prompt shipment. Demand for refined grades was fairly active. Refined salad was higher at 12¾c., tankcars, New York basis, prompt delivery.

Tung—Despite quiet trading, this market was firm because of lack of selling pressure. Tankcars were higher at 29c. to 29½c. per pound, tankcars, New York, prompt delivery, depending upon seller. Drums were held at 31c. to 31½c., spot depending upon quantity.

The Tariff Commission has recommended to the President that the present import quota not be terminated on tung oil and tung nuts. (See story on page 7 for details.)

Miscellaneous

Cocoa Butter—Trend of market continued up despite slow business. Spot stocks were raised to 66c. to 71c. per pound, depending upon quantity.

Copra—Trading was light. Prompt shipment was sold at $148.50 per ton, c.i.f. Pacific Coast.

Flaxseed—This market turned to strength, in reversal of recent trend. Bids advanced 5c. to $3.5(, spot and to-arrive, basis Minneapolis. Upturn in cash flaxseed followed sharp futures advances at Winnipeg and Minneapolis, based in part on reports that Argentina would not allow export of flax unprocessed.

Fats and Greases

Greases — Improved demand caused quotations to advance ⅛c. per pound. Trading was fairly active at the higher levels. Choice white was higher with lard and ranged from 7½c. to 7⅝c. per pound, tankcars, delivered. Yellow was sold at 5⅛c., with ⅛c. more asked for better grades.

Lard—This market was firmer. Cash

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Oils, Fats and Waxes

lard was higher at 8¾c. per pound, drums, Chicago.

Tallow—Active trading took place at ⅛c. higher for all grades. Soapers absorbed sizable quantities at the advance. Export interest also was reported improved. Bleachable fancy sold at 5¾c. per pound, tankcars, delivered; prime was held at 5½c. guaranteed fancy was sold and bid at 5⅞c.; special, 5⅜c. and No. 1, 5⅛c. same basis. Edible tallow was raised to 8⅜c., same basis. Guaranteed fancy was quoted at 6⅜c., bulk, f.o.b. steamer and drums sold at 7.40c., f.a.s.

Cake and Meal

Cottonseed Meal—Active demand continued to absorb production resulting in light offerings and higher prices. Meal 41 percent ranged from $67 to $68 per ton, sacked, Mississippi Valley and $70 to $71, in the southeast.

Linseed Meal — Strength again predominated in this market. Prices for spot shipment advanced $2 a ton, deferred up $1.50. Supplies were tight, reflecting slow linseed oil production and excellent demand for meal. Withdrawals were active. Extracted meal, 34 percent protein, was up to $61 per ton bulk, carlots, Minneapolis, prompt shipment; $60.50, last-half December. Old process, 32 percent advanced $1.50 to $63.50, December; $63, Jan.-March.

Peanut Meal—Stocks were scanty because production was almost at a standstill. Old process 45 percent was nominal around $70 to $72 per ton, sacked and solvent $68, f.o.b. Alabama and Georgia.

Soybean Meal—Excellent demand prevailed in this market, heavy production readily absorbed by formula feed manufacturers. Mixers had let balances run down in the hope of lower prices but were forced to replenish, demand developing aggressively. Meal, 44 percent, was raised to $63 per ton, unrestricted, bulk, Decatur, nearby delivery.

Waxes, Vegetable

Buying interest in vegetable waxes was slow last week, but the market remained on a steady basis, reflecting the strength of replacements from primary sources. Carnauba grades for shipment were under government price support and firmly held at prices above the cost of stocks on spot. No. 3 Ceara crude was quoted at 55c. to 57c. per pound, spot, as to quantity and Parnahyba, 57c. to 59c., same basis. Yellows were scarce and strong on spot and for replacement. On spot, No. 1 Ceara ranged from 88c. to 90c. per pound, depending upon seller and quantity with Parnahyba, 2c. higher.

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2—Sharples #16, 304 S.S., 3 HP motor.
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1—3000 sq. ft. O. G. Kelly, 309 S.S. forced feed Evaporator, UNUSED.
1—550 sq. ft. Buflovak monel single effect Evaporator.
1—300 sq. ft. Swenson 347 S.S. Single Effect Evaporator.
1—250 sq. ft. Buflovak 304 S.S. Single Effect Evaporator.
10—Stainless Heat Exchangers; 910, 536, 370, 250, 131, 70 sq. ft.
5—Pfaudler 26 sq. ft. glass lined Condensers.
1—4'6"x46' 316 S.S. Clad Column, 250 PSI.
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Sharples C-27, Super D Hydrator, 316 S/S.
Fletcher Centrifuge, Suspended 48" dia.
Bird 40" x 60" Solid Bowl Continuous, S/S, UNUSED.
Sweetland Filters #7, #12.
U.S. Auto Jet Self-Cleaning Filter 54".
Buflovak Drum Dryer 5'x12', Chrome Roll.
Oliver Precoat Filters 8'x6' & 8'x10'.
Oliver Horizontal Filter 6 'D, 316 S/S.
Swenson Evaporators 3625 & 5780 sq. ft.
Pfaudler 100 gal. glass lined jktd. Reactor.
Spray Dryer S/S, Lab & Production Sizes.
Link Belt Dryer, Roto Louvre, 604-24, 316 S/S.
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Rotary Kiln 7' x 120'
Rietz Mill, RDC-18, S/S, 75 HP.
Baker Perkins 100 Gal. Jktd. Double Arm Mixers.
Simpson 40" Porto Muller.
Vibrating Screens, 5x12, 4x10, 4'x8', 3x6.
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Stainless Pressure Tanks, 50# 59"w x 52"V.
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ECH SPECIALS

Day #40 Imperial Mixer 150 gal. w'k, 40 hp
Abbe 5'x6' Jkt. Ball Mill, chrome mang. steel
Stokes Vac. Shelf Dryer, 2 shelves, 40"x42"
Pfaudler 1500 gal. Glass Tank, closed top
Blaw Knox SS 100 gal. Autocl. agtd. 1000 psi
Buflovak 4'x8' Lab. SS Dbl. Drum Dryer.
Simpson 24" SS Lab. Mix Muller, 1½ H.P.
New Niagara SS Vert. 24" Filter, 55.2 sq. ft.
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LIQUIDATIONS

Niagara Falls, N. Y. and Everett, Mass.

EQUIPMENT OFFERINGS

Baker Perkins 100 gallon MIXER, Jacketed, sigma
Baker Perkins 300 gallon Stainless Steel Size 18DIM Sigma Blade MIXER, 30 HP motor.
Nash L3 Stainless VACUUM PUMPS 140 CFM (3).
11,500 gal. Stainless TANKS Agitated.
42" Tolhurst CENTRIFUGE Stainless Perforate.
48"x41' Stainless BUBBLECAP COLUMN, 40 trays.
72"x30' Stainless BUBBLECAP COLUMN 21 trays.
Pfaudler 500 gal. ELL GLASS LINED REACTOR, agitated, 75 PSI jacket, 25 PSI internal.
Pfaudler 300 gal. EL GLASS LINED REACTOR, agitated, 90 PSI jacket, 25 PSI internal.
4500 gal. 347 Stainless COIL PANS, 6'x20'2".
5'3"x3' Oliver Precoat Rotary VACUUM FILTER, Vaportite, 316 Stainless.
Link Belt 604-24 Stainless ROTO-LOUVRE DRYER.
1860 sq. ft. Stainless REBOILER 271—1"x12' tubes.
8'x60'x⅜" Allis-Chalmers ROTARY KILN.
60"x84" Single deck Rotex #421 SCREEN.
Swenson EVAPORATOR 435 sq. ft. Stainless single effect condenser, vapor separator.
1000 gal. Dopp Ni-resist jktd., agit. REACTOR.
1000 gal. Steel REACTOR, agitated, 125 PSI internal, 25 PSI jacket.
Labour PUMP 316 STAINLESS 125 GPM, 211' head.
500 ft. Glass lined jacketed PIPE 2", 3" and 4".
2000 lb. Stainless RIBBON BLENDER 32"x96".
306 sq. ft. STAINLESS EXCHANGER, ¾" tubes.
36"x20' COLUMN 316 STAINLESS Packed, 100 PSI.
4'x40'x⅜" ROTARY DRYER, NEW welded shell.
Labour PUMP STAINLESS 750 GPM @ 80' Head.
4000 gal. Vertical Type 347 STAINLESS TANK.
6'x36" Hardinge CONICAL BALL MILL, 75 HP.
Buflovak 6' jacketed vacuum CRYSTALLIZER.
1000 sq. ft. STAINLESS EXCHANGER, ¾" tubes.
78"x18' STAINLESS 316 BUBBLECAP COLUMN 14 trays, 180 caps/tray, 100 PSI.
12"x18' STAINLESS PACKED COLUMN, 100 PSI.
8'x150' ROTARY KILNS complete (2).
8'x90' ROTARY DRYER complete.
8000 gal. Stainless 316 TANK 10'x14' Vertical.
3,500 gal. 304 Stainless TANKS 8'x9' Vertical.
2,300 sq. ft. Stainless EXCHANGER, 1" tubes.
16"x10'7" Pfaudler GLASS LINED COLUMN.
Swenson Stainless Jkt. CRYSTALLIZERS 24"x28', 36"x24" Goslin Rotary Vac FILTER SS316.

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MIXERS

5523—Baker Perkins Lab. Size Stainless Steel Jktd. Double Sigma Mixer; 2 gal. 11½"x6½"x9½".
5454 G2—Baker Perkins Stainless Steel Lab. Double Sigma Arm Mixer 2¼gal.: 6½"x9½"x11½".
5520 D1—Baker Perkins 2 gal. Double Arm Jktd. Mixer; 2 HP.
5325—Baker Perkins Lab. Jktd. Dispersion Mixer UNE 7; 5 gal. Pressure Cover, Screw Tilt; 30 HP.
5250—Reade Jktd. Steel Dbl. Arm Mixer; 15 gal.; 15 HP.
5383—Baker Perkins Stainless Double Arm Mixer, 15 gal. Jacketed Vacuum Cover; 15 HP.
5482—J. H. Day Double Sigma Arm Jacketed Mixer; 18"x18"x 20"; 3 HP.
M25 401—Baker Perkins Stainless Steel Unjacketed Mixer; S.S. 33" 32"x36"; 20 HP Motor.
5525 C1—Baker Perkins Stainless Lined Size 14—50 gal. Dbl. Arm Jacketed Mixer; Vacuum Cover; 15 HP.
5426—Baker Perkins Size 14—50 gal. Double Sigma Arm Mixer Jacketed: 28"x29"x23"; 7½ HP Motor.
5520 D2—Baker Perkins 50 gal. Dbl. Arm Jacketed Mixer: 30 HP.
5481 M3—J. H. Day Cincinnatus 75 gal. Jacketed Double Arm Mixer; 10 HP.
2160—W. & P. Type Jktd. Double Arm 100 gal. Mixers geared both ends.
5316—Baker Perkins 100 gal. Dbl. Arm Jktd. Mixer; geared both ends; power screw tilt; motorized.
5223 C-3-4—Two Lehmann Amalgamators; Stainless Lined; 32"x 44"x36"; Stainless Arm; 7½ HP.
5401—Werner & Pfleiderer 150 gal. Dbl. Arm Jacketed Mixer.
5481 M1-2—Two Day Cincinnatus 200 gal. Jacketed Double Arm Mixers with Covers good for Internal Pressure; 20 HP.
5502—Baker Perkins 200 gal. Jacketed Double Arm Mixer; 50 HP.
4742—Baker Perkins Size 16 UUMM Double Arm Dispersion Type Mixer 240 gal. holding; 150 gal. working; Compression Cover good for 100 HP.
4271 D1—Baker Perkins Size 17 Class BB Type VII Jacketed Mixers; double sigma arms; 200 gal.
M25-501—J. H. Day Stainless 250 gal. Jktd. Mixer with Sigma arms; geared both ends.
4409 D—8 Baker Perkins Heavy Duty Jacketed Mixers; 300 gal. working; Size 18 with Hydraulic Tilt.
4343 D—7 Baker Perkins Heavy Duty Jacketed Mixers Sigma Double Arms; Size 17; 200 gal. working.
5070 F1-2—Stainless Lined Double Sigma Vacuum Mixers; 300 gal. 56"x50"x44"; with 60 HP Motors.
4921 T53—Baker Perkins Hexagonal Jacketed Baratte; 150 gal. good for Vacuum; 36"x39".

DRYERS

3853 S7—Flash Drying System in Type 316 Stainless Steel.
5398 G2—Despatch Steam Tray Type Oven Model "C" 26"x x70"x42", Two compartments, 10 Trays each.
5200—Sandvik Stainless Steel Belt Dryer; 24 wide.
D14 V1—Gas Fired Calcining Oven 12' wide; 9'6" long; 11'9" high; Double Door; two trucks; Stainless Trays.
4400 C1—Thomas Double Door Gas Heated Oven 36"x30" x21½".
3824S-5—Freas Electric Ovens complete; 14"x16"x16".
D6-600—Everdur Dry Pan 750 gal. 7'5"x2'7½"; jacketed; scraping agitator.
5207—Stokes Double Chamber Steam Jacketed Impregnator; 20 gal.
5193 C1-2—Two Double Chamber Stokes Impregnators; #5648-5748 complete.
4812 D11—Pittsburgh Lectro Dryer Model BWC; Size 3500.
4955 M43—Pittsburgh Lectro Dryer Model BAC; Size 25.
5272 P8-9—2 Lectrodryer Dehumidifiers Model BAC Size "O".
5183—Buflovak Vacuum Double Drum Dryer; Chrome Plated Rolls 6"x7⅝"; accessories.
4912—Witteman Double Drum Atmospheric Dryer 22"x38" with accessories.
D9 602—Buflovak Twin Drum Dryer in MONEL; 32"x72"; 10 HP.
D9-103—American Double Drum Dryer; 24"x60".
3316—Double Drum Dryer; 28"x60".
4338 A3—Double Drum Dryer 28"x60" with doctor knifes.
D9-550—Buflovak Stainless Double Drum Dryer 32"x120".
4394—Buflovak Double Drum Dryer 42"x100" complete.
5013 H4—Rotary Cooler 3'x15' with accessories.
4767 W2—Single Drum Dryer or Flaker 36"x45".
D9-127—Buffalo Vacuum Drum Dryer 5'x12' with accessories.
4493—Buffalo Bronze Drum Flaker or Dryer; 48"x40" with 10 HP motor.

SEND FOR NEW 1962 ILLUSTRATED COMPACT CATALOG

MILLS — CRUSHERS PULVERIZERS

4551 S4—Abbe Stainless Steel Lab. Ball Mill 9"x18".
5354 M6—Abbe Pebble Mill 3'x3'.
4830 B6 to 11—Six Patterson Porcelain Lined Pebble Mills, Type B; 30"x42".
M3 G303—Patterson Chrome Manganese Lined 50 gal. Ball Mill; 24"x36" with 3 HP motor.
5013 H1—Abbe Jacketed Steel Ball Mill 5'x4' with balls.
5013 H2-3—Steel Ball Mills Jkdt.: 42"x32"; 54"x48".
5310—Abbe No. Buhrstone Lined Pebble Mill; 52"x36".
5354 M7—Patterson Steel Ball Mill 54"x54"; 15 HP Motor; Steel Balls.
5540 T16—Unlined Steel Ball Mills; 3'x5'; 4'x6'; 4'6"x5'6"; 5'x7' - 5'3"x7'3" - 6'x8'.
5354 M5—Abbe Size #2½ Pebble Mill; 5'x6'; 10 HP.
M3 P304—International Porcelain Lined Pebble Mill; 48"x60" with 15 HP Explosion Proof Motor.
5164 A2—International Porcelain Lined Pebble Mill; 5'x6'; with 15 HP Motor.
4879—Jacketed Steel Ball Mill 5'x2'6"; lifting bars with 25 HP Motor.
3443—International 8'x8' Porc. Lnd. Pebble Mills; 50 HP Gearmotors.
M8-205 Hardinge Conical Ball Mill; 3'x24" with Conical Feeder, Manganese Liner; 15 HP motor.
4693—Jacketed Buhrstone Lined Pebble Mill; 6'x6'; 1000 gal.; 25 HP.
M3-S400—Allis Chalmers Gates Tube Mill 5'x22'; Silex Lined.
5395 M1-2—Allis Chalmers 2 Compartment Compeb Mills; 7'x22' Meehanite Liners; each with 400 HP Motor.
5395 M4-5-6—Allis Chalmers Continuous Tube Mills 7'x22' with ribbed Meehanite Liners.
5356 N29—Hardinge Conical Ball Mill 3'x8" Fan and Dust Collector.
5540 T17—Rod Mills; 6'4"x6'4"; 6'x8'.
5147 S2—Schutz O'Neill 22" Style "D" Pulverizer.
3429 A8—Gruendler Puverizer 48"x12" requires 150 HP.
3655 W2—Gruendler Supermaster No. 1 Hammer Mill; 15 HP.
5525 C4-6—Mikro Pulverizers Model 1 SH with 5 HP Motors.
4867—Four Stainless Steel Mikro No. 2 Pulverizers; motorized.
5540 T-14—Five Mikro Pulverizers Model No. 2 S 1.
5246—Mikro Pulverizer Model No. 3D 1.
3324 E2—Mikro No. 4 F Pulverizer; 15"x24".
5394—Mikro Pulverizer Model 4 TH with Triple Screw.

REACTORS — AUTOCLAVES RETORTS

4890—One gal. Cast Iron Jacketed Autoclave designed for 500 PSI with agitator.
3662 D20—Welded Steel Jktd. Autoclave with Bolted Cover; 20"x26".
4913 G19—Jackson & Church Vertical Autoclave, Jacketed; 41"x54" 300 gal.; quick opening head; 100 PSI ASME.
4848 B6-7—Steel Autoclaves 90 gal. 24"x48"; quick opening covers; 250 lb. ASME U69.
3259 G5—Steel Hor. Autoclave with tracks; 66" dia. x 14'7".
V4-701—Horizontal Steel Vulcanizer 6'x18'.
R4-1002—Biggs Boiler Rotary Digester 12'6" diameter ASME.
R4-251—Struthers Wells Jacketed Steel Rotary Autoclave or Digestor 100 PSI-ASME; 9'6"x12'; with 7½ HP motor.
V4-603—Struthers Wells Vulcanizer; 150 PSI-ASME; 5'x20'.
4937 V2—American MONEL Lab. Sterilizer 16"x24"; Dbl. Wall.
4855—Climax Jacketed Sterilizer; 20"x36".
4163—American Sterilizer; 30"x48"x84" Jacketed; Double Door; steel carriage on track.
4245 L5—American Sterilizer Double Door; 30"x42"x84" Jktd.
4245 L4—American Sterilizer Double Door; 39"x48"x84" Jktd.
4245 L6—Wilmot Castle Sterilizer 36"x42"x84"; Jacketed; Dbl. Door.
3845 F1-8—Battery of Vertical Steel Retorts 42"x72" with counter-weighted covers.
3824S-12—Pfaudler Glass Lined Jacketed Agitated Reactor; 12"x12".
4731 G-12—Pfaudler Glass Lined Reactor Jacketed, Agitated: 24"x36".
5323 G—Pfaudler Jacketed and Agitated Glass Lined Reactors; 5 gal. to 100 gal.
4584 G7—New 3 Stage Continuous Soaker or Reactor; 4'x20' Horizontal; Steel 1875 gal. agitated.

SPECIAL LOT OF PRESSURE VESSELS FROM THE LIQUIDATION OF THE Cincinnati-Toms River Chem. Co.

Cast Steel and Welded Steel Nitrators, Sulphonators, Reactors, Autoclaves, Blow Cases, Stills, Jacketed and Agitated; all sizes

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CHEMICAL-METALLURGICAL PLANT
FREDERICKTOWN, MISSOURI

TYPE 316 STAINLESS & TITANIUM EQUIP. • PLANT NEW 1953

AUTOCLAVES

2—3800 gal. Struthers-Wells, 6' dia. x 18' long, brick-lined, ASME 1000 psi WP, (3) vert. Titanium Agit.
1—3500 gal. Struthers-Wells, 6' dia. x 16'4" long, T316 SS clad, ASME 300 psi WP, 45 sq. ft. T316 SS coil.
2—2850 gal. Struthers-Wells, 5'6" dia. x 15' long, brick-lined, ASME 800 psi WP, (3) vert. T316 SS Agit.
2—2250 gal. Nooter, 5' dia. x 15' long, T316 SS clad, ASME 800 psi WP, (3) vert. T316 SS Agit.
3—800 gal. Struthers-Wells 4'6" dia. x 10' long, T316 SS clad, ASME 400 psi WP, (3) vert. T316 SS Agit.
1—165 gal. Struthers-Wells, 2' dia. x 7' long, Titanium lined, ASME 1000 psi WP, (3) vert. Titanium Agit., elec. heaters.
1—5 gal. T316 SS, Nooter, direct-fired, Agit.
1—3 gal. Autoclave Eng., T316 SS, direct-fired, 2000 psi WP, Agit.
1—½ gal., Blaw-Knox T316 SS, 2000 psi WP, direct-fired, Agit.

FILTERS — CENTRIFUGALS

2—Niagara #36H-350-2, T316 SS press.-leaf filters, 350 sq. ft., vert. leaves, horiz. jacketed tank.
2—Process Filters #901A4, T304 SS pressure leaf filters, 300 sq. ft., vert. tank & leaves.
2—Feinc 3' dia. T316 SS horiz. rotary vacuum filters.
1—Feinc 3' dia. horiz. vacuum filter, Monel & Rubber-Covered.
4—Eimco 8'x8' rotary vac. filters, rubber-covered.
1—Eimco 4'x8' T316 SS rot. vac. filter, precoat.
1—Merco #A-24, T316 SS contin. centrif., 40 HP.
1—Merccne #C-400 T316 SS contin. centrif., 40 HP.
2—Sharples C-20 Super-D-Hydrators, T316 SS.

PUMPS

4—Aldrich 3⅛"x5" Triplex, T316 SS, 1000 psi, 30 HP.
3—Aldrich 2⅛"x3" Triplex, T316 SS, 450 psi, 10 HP.
3—Aldrich 1½"x2" Triplex, T316 SS, 1000 psi, 7½ HP.
1—Milton-Roy #M-D1-101-84-SM, T316 SS, 78 GHP @ 1000 psi.
2—Allis, 3" rubber-lined centrif., 10 HP.
3—Galigher 2" rubber-lined centrif., 5 HP.
30—Worthington 2"x1½" Worthite centrif., w/motor.
20—Worthington 1½"x1" Worthite centrif., w/motor.
6—Oliver centrif. Olivite: 2", 1¼", w/motors.
2—Ing.-Rand #10AFUS, Iron centrif., 3500 GPM @ 125' 12"x10", 125 HP.
3—Ing.-Rand #2½VHTB Iron Turbine, 1636 GPM @ 3380' head, 250 HP.
2—Worthington #16QHO-1 Iron Turbine, 3500 GPM @ 80' head, 100 HP.
2—Nash H-8 vacuum pumps, 50 HP.

CALCINERS — DRYERS
FURNACES — BOILERS

3—Bartlett & Snow, 14" I.D. x 18'5" long stainless rotary calciners, indirect gas-fired, ⅜" thick calcining tube.
1—Bartlett & Snow 3' dia. x 19'6" long rotary hot-air dryer, ¼".
1—Gas Machinery Co. 5' dia. rotary annealing furnace, 1850° FWT.
1—Gas 2-tube reformer furnace or heater, 26'10" high, 9" refractory lining, John-Zink gas burners.
2—Foster-Wheeler 5190 sq. ft. boilers, 1200 psi, 50,000#/hr., w/economizers, gas-oil fired.

STAINLESS STEEL TANKS

(Type 316 Stainless Steel)

3—11,800 gal. vert., 12' dia. x 14' high, 3/16", S.E. Agit.
4—10,000 gal. vert., 12'x12', 3/16", 15 HP Turbine Agit., sump pumps.
1—10,000 gal. vert., 12'x12', ¼", 15 HP Turbine Agit., JACKETED.
2—5800 gal. vert., 10'x10', 3/16", 15 HP Turbine Agit.
1—4200 gal. vert., 8'6"x9', 3/16", cone bottom.
1—3500 gal. horiz., 6'x16', 300 psi WP, dished heads, T316 SS clad, 45 sq. ft. coil.
6—3000 gal. vert., 8'x8', 3/16", Agit.
1—1700 gal. vert., 6'x8', 3/16", 10 HP Agit.
1—1150 gal. vert., 5'6"x6', 3/16", 5 HP Agit.
1—900 gal. vert., 5'x6', 3/16".
1—620 gal. vert., 3'x10'8", ¼", dished top, cone bottom.
1—560 gal. vert., 3'x9'8", ¼", dished top, cone bottom.
10—30 to 100 gal. T316 SS tanks.

EVAPORATORS
HEAT EXCHANGERS

1—1064 sq. ft. General Amer. T316 SS forced circ. evap.
1—1200 sq. ft. Swenson, T316 ELC SS single-effect vert. long-tube evap.
1—5300 sq. ft. Swenson T316 ELC SS double-effect vert. long-tube evap.
1—6570 sq. ft. Swenson T316 ELC SS 3-body, 2-stage vertical long-tube evap., T316 ELC SS vertical heaters, Neoprene rubber-lined vert. vapor bodies, with pumps, piping, controls, etc.
1—220 sq. ft., T316 SS double-pipe cooler.
2—212 sq. ft. T304 SS tru-fin tubular condensers.
2—192 sq. ft. T304 SS Graham "Monobolt" exchangers.
1—154 sq. ft. Davis exchanger, admiralty tubes.
1—90 sq. ft. Whitlock T316 SS horiz. U-tube exchanger, ASME code 1000 psi WP shell & tubes, remov. tube-bundle.

COMPRESSORS

2—Ingersoll-Rand air compressors, 2610 cfm @ 1000 psi, model #PRE-4, size 10 & 6¼x19, & 27½x16¾x19, (4) stage, 1000 HP motor.
2—Penna. air comp., 305 cfm @ 100 psi, model 3-ATC, size 12x11, 75 HP motor or 88 HP gas-engine drive.
2—Chicago-Pneumatic gas comp., 317 cfm @ 1500 psi, model #TCB-3, size 11¾ — 7¼x3⅛x13, 3-stage, 125 HP.
1—Ing.-Rand air comp., type ES-3, 10½x7⅛x3⅛, 125 HP motor.

MISCELLANEOUS

30—Nettco Agit. drives: #WT-47, WT-37, WT-27.
1—Marcy 64½ contin. ball mill, 100 HP.
2—Munson #7 rotary batch blenders, 60 cu. ft., heavy-duty, 25 HP motor.
1—Komarek-Greaves 1000#/hr. briquett press, SS rolls, 90,000 psi, w/vari-drive.
3—Screw type classifiers, T316 SS, 12" dia. x 96".
35—Agitators, T316 SS, 10-blade turbines, with shafts.
3—Wallace & Tiernan #WB9LM Merchen scale feeders.
3—Wallace & Tiernan #A-552 dry chemical feeders.
1—Flotation machine, 4-cell, 56", w/drives.
3—Toledo 750# dial scales, portable.
21—Nitrogen gas cylinders, 2100 psi.
20—Rubber-lined tanks, to 10,000 gal., T316 SS Agit.
1—Sweco 16" dia. Stainless separator screen.
20,000'—T316 SS Pipe, Sch. 10 & Sch. 40, all sizes.
2000'—Titanium pipe & tubing.
5000'—Hard rubber, plastic pipe.
5000—T316 SS valves, screwed or flanged, to 6".

STOCK ITEMS

KETTLES — REACTORS

1—2000 gal. Glascote blue G/L reactor, jacketed, ASME.
45—1400 gal. Pfaudler blue G/L jacketed kettles, Agit.
4—1350 gal. T347 SS jkt. kettles, Agit.
11—1250 gal. Pfaudler blue G/L jacketed closed reactors, vacuum, w/cond., Agit.
1—1200 gal. Artisan T304 SS clad reactor, vac. int., 100 psi jkt., Agit.
1—1000 gal. Dopp Cast Iron Kettle, jacket, agit.
1—1000 gal. T316 SS jkt. reactor, ASME, UNUSED.
1—1000 gal. Pfaudler "R" jkt. glassed reactor.
1—750 gal. Graver T304 SS jkt. reactor, Agit.
1—750 gal. Pfaudler jkt. glassed kettle, Agit.
35—600 gal. Pfaudler Stainless Steel jacketed kettles.
2—500 gal. T304 SS jkt. reactors, ASME, UNUSED.
3—500 gal. Pfaudler "R" series, glassed reactors, Agit.
1—500 gal. T316 SS jkt. reactor, Agit.
6—465 gal. T304L SS reactors, 150 psi int, 165 psi jkt.
1—300 gal. Pfaudler blue G/L reactor, jkt., Agit., ASME.
1—300 gal. T304 SS jacketed reactor, ASME, UNUSED.
65—250 gal. Pfaudler blue G/L kettles, jkt.
2—200 gal. T304 SS jkt. reactors, ASME, UNUSED.
1—175 gal. T304 SS jkt. reactor, Agit.
1—150 gal. Pfaudler "P" jkt. glassed reactor.
2—100 gal. T304 SS jkt. reactors, ASME, UNUSED.

MIXERS — MILLS
PRESSES — CRUSHERS

35—Baker-Perkins 200 gal. sigma-blade jacketed mixers, screw or c/wt. tilts.
1—Baker-Perkins 100 gal. Dispersion-blade mixer, #15-UUMM, 100 HP drive, jacketed, cover, motorized tilt.
1—Baker-Perkins 10 gal. Disp. mixer, T347 SS, jkt.
1—Sturtevant 75 cu. ft. T304 SS rotary blender.
2—145 cu. ft. horiz. ribbon blenders.
1—Raymond 66", 6-roller hi-side mill, 200 HP.
1—Raymond 50", 5-roller hi-side mill, whizzer.
3—Hardinge conical pebble mills: 8'x48", 7'x36".
2—Patterson 8'x10' batch pebble mills, buhrstone.
12—Abbe 6'x8' batch pebble mills, buhrstone, 30 HP.
1—Allis-Chalmers 6'x12' rod mill, 125 HP.
1—Bonnot 5'x10' ball-rod mill, 75 HP.
1—Fitzpatrick #F stainless comminutor.
3—Forster size #8 hammermills, 100 HP.
6—Davenport Dewatering Presses: #1A, 2A, 3A.
1—HPM steeping press, 63 ton, 20x18x101, UNUSED.
2—Komarek briquette presses, 160,000 psi, almond size.
2—F. J. Stokes #T single punch tablet presses.
2—F. J. Stokes #DDS-2 rotary tablet presses.
2—Symons 2' cone crushers: Shorthead, Std.
4—Jaw Crushers: 36"x15", 24"x13", 20"x6".

FILTERS

4—1250 sq. ft. Shriver cast P. & F. filter presses.
5—1000 sq. ft. Valley Alum. P. & F. filter presses.
1—510 sq. ft. Niagara #510-28, T316 SS.
1—88 sq. ft. Sparkler type RSC, T304 SS vert. leaves, Plastisol lined horiz. tank, 1958.
2—Oliver 5'3"x3', T316 SS rot. vac., precoat.

DRYERS — KILNS

1—Buflovak 2'x7'10" rotary vacuum dryer, T304 SS, ASME jkt., 3 HP XP Agit.
1—Swenson 5' dia. spray dryer, T316 SS.
3—F. J. Stokes #138J-16 Vacuum Shelf Dryers, 195 sq. ft., 16 shelves.
2—Buflovak 42"x120" Dbl. drum dryers, ASME 160 psi.
1—Buflovak 32"x52" Dbl. drum dryer.
1—Buflovak 6"x8" Dbl. drum dryer, Vac.
1—Buflovak 5'x12' single drum VACUUM dryer.
1—Vulcan 10'x11'x175' long rotary kiln, 2-tires, 13/16".
1—Allis 7'x120' rotary kiln, ⅝" welded.
1—Link-Belt #900-30 Roto-Louvre dryer.
2—Bartlett & Snow 8'x6"x70' rotary dryers, ⅝" welded.
1—6'x150' rotary kiln, 5/8" welded.
1—Link-Belt #604-18 Roto-Louvre dryer.
1—Louisville 5'x30' steam-tube dryer, welded.
2—Louisville 4'6"x25' steam-tube dryers, welded.

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3—Pfaudler Series R 2000 gal. glass lined jacketed reactors complete with impeller type agitators, baffles and drives.

3—Glascote Model HR 2000 gal. glass lined jacketed reactors, complete with impeller type agitators, baffles and drives.

3—Glascote Model HR 1500 gal. glass lined jacketed reactors, complete with impeller type agitator, baffle and drive.

1—Pfaudler Series R 1500 gal. glass lined jacketed reactor, complete with impeller type agitator, baffle and drive.

1—Pfaudler Series EL glass lined 750 gal. jacketed reactor, complete with anchor type agitator and drive.

2—SS 2000 gal. jacketed reactors, complete with impeller type agitators and drives.

1—Alloy Fabricators SS 5000 gal. jacketed reactor, complete with impeller type agitator and drive.

2—SS vertical storage tanks, 11,000 gal.

2—Baker Perkins Sixe 6CE double arm sigma blade jacketed mixer, 2¼ gals., complete.

2—Day type 304 SS horizontal double ribbon blenders, 62.5 cu. ft.

1—Cowles type 316 SS dissolver, Model 20D with 20 HP explosion proof motor.

3—Sprout Waldron jacketed double ribbon blenders, 30 cu. ft.

15—Robinson SS ribbon blenders, 255 cu. ft.

1—Sturtevant SS #7 Dustite rotary batch blender.

1—Raymond 2 roll high side mill.

1—Williams "Comet" 4 roll mill.

2—Mikro SS #3Th pulverizer.

1—Mikro #1 SH SS pulverizer.

1—Shriver 56" filter press skeleton with hydraulic closing device.

1—Niagara SS horizontal filter, Model 33-12-D.

1—Niagara SS horizontal filter, Model 33-D7.

1—Louisville SS rotary dryer, 8' x 50'.

1—Davenport rotary steam tube dryer, 5' x 30'.

70—Alloy Fabricators 400 gal. SS jacketed reactors.

18—Stokes type 304 SS jacketed rotary vacuum dryers, 3' x 10' and 3' x 15'.

5—Stainless steel double cone jacketed vacuum blenders, 10 cu. ft.

1—Buflovak 6" x 8" chrome plated double drum dryer.

2—Sharples type 316 SS nozljectors with 40 HP explosion proof motors.

1—Baker Perkins SS Termeer centrifuge, Model HS-24.

1—Tolhurst SS suspended type centrifuge with 32" imperforate basket, complete with motor and plow.

1—Bird SS 40" suspended type centrifuge, complete with perforate basket, plow and motor.

1—Western States type 316 SS suspended type centrifuge, complete with perforate basket, plow and motor.

18—Davis Engineering heat exchangers, stainless steel, 115, 134, 156 and 208 sq. ft., NEW.

1—Patterson-Kelley Carpenter 20 heat exchanger, 520 sq. ft.

1—Stokes tablet press, Model RDS-3.

1—Pfaudler type 316 SS 750 gal. reactor.

3—Pfaudler SS reactors, 200 and 100 gals.

1—Stokes SS jacketed rotary vacuum dryer, 2' x 6'.

1—Eimco SS rotary vacuum filter, 4' x 4'.

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Hammer Mills & Pulverizers 3 to 50 HP.
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Day Jumbo 700 gal. horiz. Mixer.
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Pharmaceutical Firms and Kefauver

—Continued from page 52

drug price investigation that the US lagged behind the other countries in new drug discoveries. He said the data used was utterly unsound and arithmetically incorrect.

Since 1940, he said, there have been sixty new drug discoveries credited to the US with its strong patent system; twenty-nine new drug discoveries in England, France, Germany and Switzerland with varying and intermediate patent rights, and none in Italy with no patent rights.

In a statement prepared for the committee, Dr. Klumpp pointed out that a patent does not give the patentee the right to work the invention or to sell it. He could do that without any patent.

All the patent does, he explained, is to provide an incentive to invent, by giving the patentee the right to exclude others from practicing the invention for seventeen years.

Turning to the provisions in the bill for compulsory licensing of drug patents after three years, Dr. Klumpp warned that this would retard rather than stimulate progress.

The minute one concern introduces a new patented drug that is commercially successful, it serves as a powerfully stimulus to scientists of other concerns to find something equal or better he said.

Compulsory licensing on the other hand will lay a dead hand on invention, he continued. Instead of spending for research, many will find it cheaper to wait until someone else does the inventing, and then apply for a license.

Dr. Volwiler warned in a similar prepared statement that if the patent provisions of the bill become law, companies will have no other choice than to:

(1) Concentrate on fields where they presently have products; (2) cut back on research activities; (3) increase marketing efforts to secure a maximum position in fields where business already exists, and (4) look for new fields where staffs could engage in research on a practical business basis.

Dr. Cavallito's statement stressed the importance of a strong patent system to the small drug producer, citing his company as an example of one that has been able to progress only because of its research activities and the protection afforded its inventions by patents.

5—Baker Perkins 100 gal., 2 arm sigma—jacketed roller bearings—hyd. tilt.

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MERCURY—100 flks, Leghorn Trading Co, Leghorn
170 flks, Vera Cruz
METHYL-A-HYDROXY ISOBUTYRATE—5 dms, Eastern Chemical Corp, Liverpool
MONOCHLOROACETIC ACID—250 dms, H A Gogarty, Rotterdam
MONOSODIUM GLUTAMATE—200 dms, E Thomas & Co, Rotterdam
MONTAN WAX—500 bgs, Matthiessen & Co, Bremen
20 cs, Dura Commodities Corp, Bremen
MUSTARD SEED—500 bgs, P J Anderson & Sons, Copenhagen
1,000 bgs, Louis Furth, Hamburg
500 bgs, Old Dutch Mustard Seed Co Hamburg
1,400 bgs, Montana Mustard Seed Co, Hamburg
400 bgs, Berns & Koppstein, Hamburg
2,900 bgs, R T French, Copenhagen
1,000 bgs, R T French, Hamburg
500 bgs, M J Golombeck, Copenhagen
374 bgs, M J Golombeck London
500 bgs, Old Dutch Mustard Co, Copenhagen
224 bgs, London
NAPHTHALENE—3,240 bgs, Ore & Ferro Corp, Rotterdam
500 bgs, Gallard Schlesinger, Antwerp
NITRO-p-PHENYLENEDIAMINE — 1 dms, Roux Lab, Dublin
NUTMEG—560 bgs, Fritzsche Bros, Singapore
280 bgs, C Czarinkow, Singapore
168 bgs P H Petry, Hamburg
200 bgs, Singapore
120 bgs, Port of Spain
NUTMEG OIL—8 dms, Magnus Mabee & Reynard, Penang
OLIVE OIL—195 dms, Strohmeyer & Arpe, Seville
100 dms, Balbo Oil Corp, Seville
49 dms, M de Rosa, Seville
122 dms, Schroeder Bros, Seville
30 dms, Cimino Importing Co Seville
95 dms, Udda & Taormina, Seville
16 dms, Asaro Bros, Palermo
242 dms, Seville
23 dms, Marseille
100 dms, Valencia
756 dms, Malaga
360 dms, Pasajes
ORANGE OIL, BITTER—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
OREGANO—600 bgs, Chemical Bank, Piraeus
400 bgs Louis Furth, Piraeus
1,060 bgs, M J Golombeck, Piraeus
1,100 bgs, Arista Oil Co, Piraeus
683 bgs, H Maormorck & Son, Tampico
221 bgs, R Downing, Tampico
OURICURY WAX—56 bgs, Wm Diehl & Co, Salvador
112 bgs, Wm H Muller Rotterdam
PALMKERNEL OIL—504 tons, Matadi
PAPRIKA—400 bgs, P H Petry, Casablanca
260 bgs, J Weinstein, Alicante
550 bgs, H Marmorek & Son, Alicante
400 bgs, A A Sayia, Alicante
600 bgs, M J Golombeck, Hamburg
250 bgs, J Raphael & Sons, Hamburg
350 bgs, Meer Corp Hamburg
100 bgs, Hamburg
500 bgs, Casablanca
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Imports at U. S. Ports

—Continued from page 66

PEANUT OIL—299 tons, Drew Chemical Corp, Rotterdam
PEPPER, BLACK—250 bgs, A G Dunn, Tandjong Priok
375 bgs, Ludwig Mueller, Tandjong Priok
40 bgs, J H Elton Singapore
300 bgs, M J Golombeck, Belem
200 bgs, Irving Trust Co, Belem
140 bgs, Singapore
PEPPER, RED—100 bgs, Mitsuibshi Corp, Kobe
100 bgs, California Commodities Corp, Kobe
PEPPER, WHITE—140 bgs, East India Trading Co, Singapore
70 bgs, J H Elton Singapore
140 bgs, A G Dunn, Singapore
130 bgs, Singapore
PETITGRAIN OIL—22 dms, Lo Curto & Funk, Buenos Aires
PHENOL—2 dms, Dow Chemical Co, Gothenburg
PHENOBARBITAL—2 bbls, International Chemical Corp, Vera Cruz
PIMENTO—100 bgs K H Landes & Co, Coatzacoalcos
100 bgs, Coatzacoalcos
PIMENTO LEAF OIL—3 dms, George Lueders & Co, Kingston
1 dm, Fritzsche Bros, Kingston
2 dms, S B Penick & Co, Kingston
2 dms, Florasynth Lab, Kingston
POLLACKLIVER OIL—100 dms, Mitsubishi Corp, Yokohama
POLYCHLOROTOLUENE—52 dms, Heyden, Newport Chemical Corp, Liverpool
POLYVINYL ALCOHOL—700 bgs, Kobe
POPPYSEED—300 bgs, Louis Furth, Gdynia
500 bgs, Hoger Corp, Gdynia
200 bgs, Globe Products Co, Gdynia
150 bgs, Levy & Levis Co, Gdynia
250 bgs, Hoger Corp, Rotterdam
200 bgs, Louis Furth, Rotterdam
100 bgs, I. Grob, Rotterdam
100 bgs Biddle Purchasing Co, Rotterdam
500 bgs, Rotterdam
100 bgs, Izmir
POTASH, CAUSTIC—198 dms, B T Chemco Inc, Gothenburg
POTASSIUM CHLORATE—190 dms, Hamburg
POTASSIUM CYANIDE—200 dms, Chemical Manufacturing Co, Liverpool
POTASSIUM FERROCYANIDE—250 cs, Teaneck Chemical Co, Antwerp
POTASSIUM METABISULFITE—4 cs, A Gusmer, Liverpool
POTASSIUM NITRATE—300 bgs, Dunkirk
POTASSIUM PERCHLORATE—136 dms, Ugine Industries, Havre
PROPYLTHIOURACIL—2 cs, Lo Curto & Funk, Hamburg
QUEBRACHO EXTRACT—5.040 bgs, American Tanners Ltd, Buenos Aires
4,132 bgs, Barkev Importing Co, Buenos Aires
QUINIDINE SULFATE—20 dms, Lo Curto & Funk, Bremen
QUININE SULFATE—20 dms, Lo Curto & Funk, Bremen
5 dms, Chas L Huisking & Co, Hamburg
RAPE SEED—550 bgs, Hartz Mountain Products, Rotterdam
264 bgs, Hinton & Co, Rotterdam
200 bgs, Foreign & Domestic Sales Corp, Rotterdam
RUTILE SAND—4,003 bgs, Brisbane
SACCHARIN—20 kgs, D Hauser, Kobe
SALT—70 dms, J M Rodgers Co, Gdynia
3 dms, A & S Corp, Liverpool
2 kgs, W A Erickson & Co, Genoa
SEEDLAC—500 bgs, C H Timm, Calcutta
SENNA LEAVES—25 bls, F D Keller & Son, Tuticorin
75 bls, Meer Corp, Tuticorin
SESAME SEED—150 bgs, Ideal Trading Co, Izmir
SHELLAC—100 bgs, Mantrose Corp, Calcutta
500 bgs, Wm Zinsser & Co, Calcutta
290 bgs, Baldini & Co, Hamburg
SKIPJACKLIVER OIL—15 dms, Arista Oil Products Corp, Yokohama
SODA, CAUSTIC—990 dms, B T Chemco Inc, Gothenburg
10 cs, B T Chemco Inc, Gothenburg
SODIUM ALGINATE—150 dms, Stein Hall & Co, Glasgow
SODIUM ALUMINATE—460 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CYANIDE—400 dms, Chemical Manufacturing Co, Liverpool
280 dms, American Cyanamid Co, Liverpool
SODIUM PERBORATE (TETRAHYDRATE)—498 bgs, Block Drug Co, Hamburg
SODIUM PHOSPHATE—450 bgs, Benckiser Inc, Rotterdam
SODIUM SULFATE, ANHYDROUS—800 bgs, Lo Curto & Funk, Antwerp
SPERMACETI—105 cs, Strohmeyer & Arpe, Liverpool
STARCH—75 bgs, National Starch & Chemical Co, Rotterdam
757 bgs, Morningstar Paisley Inc, Rotterdam
900 bgs, Geismar & Co, Bremen
1,000 bgs, Stein Hall & Co, Rotterdam
STEARIN PITCH—492 dms, G S Zeigler & Co, Liverpool
STRONTIUM SULFATE—834 bgs, Metal & Thermit Corp, Avonmouth
SULFAMIC ACID—440 bgs, H Bruckmann & Lorbacher, Havre
SULFUR, CRUDE—5,316 tons, Pan American Sulfur Co, Coatzacoalcos
TALC—910 bgs, L A Salomon & Bro, Bordeaux
800 bgs, Whittaker Clark & Daniels, Bordeaux
TAPIOCA—224 bgs, Manhattan Adhesives Corp, Penang
551 bgs, Stein Hall & Co, Itajai
TAPIOCA FLOUR—855 bgs, Manhattan Adhesives Corp, Itajai
TARTARIC ACID—300 bgs, Philipp Bros Chemicals, Palermo
80 bgs, Genoa
TERPIN HYDRATE—50 cks, Bordeaux
THYME LEAVES—102 bgs, Louis Furth, Alicante
TRAGACANTH GUM—7 cs, Am-Iran Corp, Khorramshahr
454 cs, Meer Corp, Khorramshahr
233 cs, Khorramshahr
TRICHLOROTHYLENE—503 tons, Venice
TRIMETHYLANTHIN—100 dms, Bremen
TUNG OIL—66 tons, Pacific Vegetable Oil Corp, Buenos Aires
288 tons, Murray Oil Products Co, Buenos Aires
194 tons, Buenos Aires
UREA—1,000 bgs, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—48 cs, Djibouti
VETIVER OIL—2 dms, Polarome Manufacturing Co, Port Au Prince
4 dms, Djibouti
WOOL WAX ALCOHOL—40 cs, Traders Service Corp, Liverpool
YLANG YLANG OIL—6 dms, Djibouti
ZINC SULFATE MONOHYDRATE—100 bgs, Antwerp
ZIRCON DIOXIDE—4 dms, Bremen
ZIRCON SAND—2,008 bgs, Metal & Thermit Corp, Brisbane
714 bgs, Lo Curto & Funk, Brisbane

Pyrethrum Crop

—Continued from page 7

normal this year, due to the vagaries of the weather.

British East material, along with that from the Congo and Ecuador, ordinarily constitute the highest pyrethrin content material in the world—averaging 1.5 percent. Japanese pyrethrin content stands at about 0.9 percent and Yugoslavian at 0.7.

Despite what may turn out to be a lower pyrethrin content for British East flowers, no increase in price is expected.

Consumers are reported to be working off a heavy inventory load.

The projected increase through larger plantings this year was planned principally for the benefit of approximately 31,000 independent native farmers who in the past five years have been trained to grow pyrethrum. The number of licensed farms operated by Europeans has been held to a constant figure of about 1,000.

Kenya produces approximately 80 percent of the pyrethrum sold in world markets. The country is also the largest single consumer.

LPG Sales Department Is Set Up by Shell

Shell Oil Company has established a separate department to meet the demands caused by increased activity in the liquefied petroleum gas market. Daniel E. Hendricks, jr., has been appointed manager of the department, which is divided into four regional marketing areas.

Managers of the four marketing areas under Mr. Hendrick's supervision from New York are: Edwin J. Colerick, Baltimore; Victor R. Storey, Chicago; Charles F. Dexheimer, Houston, and Thomas S. Johansen, San Francisco.

Rosin Size Tabs Unchanged

Hercules Powder Company, Wilmington. Del., has issued a price schedule extending current quotations of rosin sizes through the first quarter of 1962.

Udylite Won't Merge

—Continued from page 5

and having reached complete agreement on all points. About a week ago we became aware of some definite divergence of opinion with the Udylite group."

Moving against the merger were two M&T stockholders owning more than two-thirds of M&T's preferred stock. In a suit brought in New Jersey Superior Court the two held that the merger could not take place against their objections since it required approval from holders of two-thirds of the preferred as well as common. It was claimed that terms of the merger proposal would have treated the preferred stock "inequitably."

Udylite, a producer of metal-treating equipment, had sales in the year ended December 31, 1960, of $52,400,220. Metal & Thermit Corporation, which would have been the surviving company, had sales last year of $40,107,474. M&T is diversified in chemicals, metals, chrome plating, welding equipment and detinning operations.

Under the proposed merger, which had earlier been approved by Udylite directors (OPD 10/2/61), Udylite would have become a division of M&T—operating under the present Udylite management.

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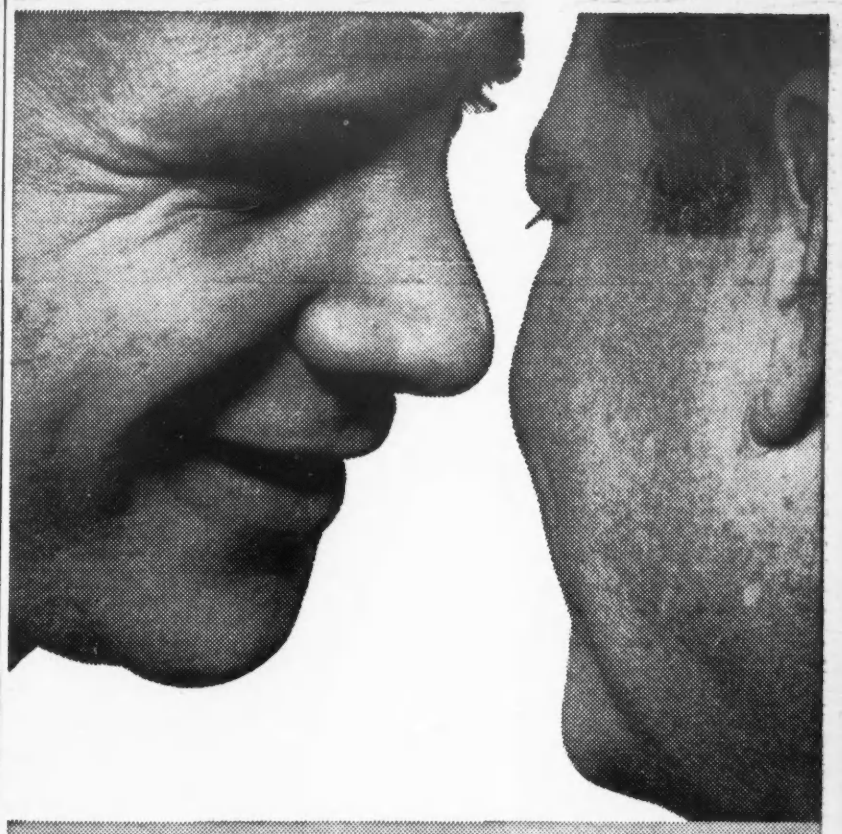

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